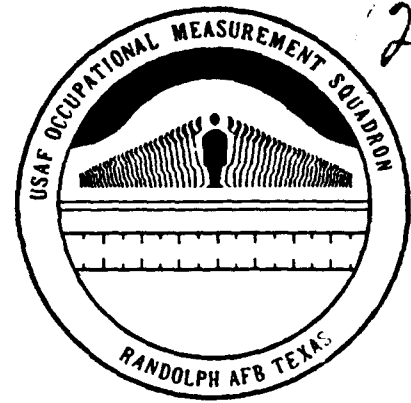


AD-A270 517



UNITED STATES
AIR FORCE



OCCUPATIONAL SURVEY REPORT

DTIC
ELECTE
OCT. 12 1993

S B D

AIR LAUNCHED MISSILE SYSTEMS

AFSC 466X0

AFPT 90-466-965

JULY 1993

93-23916

2/12/93

OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION and TRAINING COMMAND
1550 5th STREET EAST
RANDOLPH AFB, TEXAS 78150-4449

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

DISTRIBUTION FOR
AFSC 466X0 OSR AND SUPPORTING DOCUMENTS

| | <u>OSR</u> | <u>ANL</u> <u>EXT</u> | <u>TNG</u> <u>EXT</u> | <u>JOB</u> <u>INV</u> |
|--|------------|--------------------------|--------------------------|--------------------------|
| AFIA/IMP | 2 | | | |
| AFMPC/DPMRPQ1 | 2 | | | |
| AFMPC/DPMRAD5 | 1 | | | |
| AL/HRD | 2 | 1m | 1m | 1 |
| AL/HRT/DOS | 1 | 1m | 1m/1h | 1 |
| ARMY OCCUPATIONAL SURVEY BRANCH | 1 | | | |
| CCAF/AYX | 1 | | | |
| DEFENSE TECHNICAL INFORMATION CENTER | 2 | | | |
| HQ ACC/DPATD/LGM | 3 | | 3 | |
| HQ AETC/TTOTG | 2 | | 1 | |
| HQ AFSPACECOM/DPAE/LGM | 3 | | 3 | |
| HQ USAF/DPPT | 1 | | | |
| HQ USAF/LGMW | 1 | | 1 | |
| NODAC | 1 | | | |
| Standards Division (MAGTEC) | 1 | | | |
| USAFOMS/OMDQ | 1 | | | |
| USAFOMS/OMYXL | 10 | 2m | 5 | 10 |
| 392 SMTS (1472 NEVADA BLDG 8321 VANDENBERG AFB CA 37437-5315) | 3 | 3 | 3 | 3 |

m = microfiche only
h = hard copy only

DTIC QUALITY INSPECTED 2

| | |
|---------------------------|-------------------------------------|
| Accession For | |
| NTIS GRA&I | <input checked="" type="checkbox"/> |
| DTIC TAB | <input type="checkbox"/> |
| Unannounced | <input type="checkbox"/> |
| Justification | |
| By _____ | |
| Distribution/ _____ | |
| Availability Codes | |
| Dist | Avail and/or Special |
| A-1 | |

TABLE OF CONTENTS

| | PAGE NUMBER |
|--|----------------|
| PREFACE. | v |
| SUMMARY OF RESULTS | vi |
| INTRODUCTION | 1 |
| Background | 1 |
| SURVEY METHODOLOGY | 1 |
| Inventory Development. | 1 |
| Survey Administration. | 2 |
| Survey Sample. | 3 |
| Task Factor Administration | 3 |
| SPECIALTY JOBS (Career Ladder Structure) | 5 |
| Overview of Specialty Jobs | 5 |
| Group Descriptions | 11 |
| Comparison of Current Job Structure to Previous Study. | 15 |
| ANALYSIS OF DAFSC GROUPS | 17 |
| Skill-Level Descriptions | 17 |
| Summary. | 25 |
| ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS. | 25 |
| TRAINING ANALYSIS. | 25 |
| First-Enlistment Personnel | 28 |
| TE and TD Data | 28 |
| Specialty Training Standard (STS). | 33 |
| Plan of Instruction (POI). | 37 |
| JOB SATISFACTION ANALYSIS. | 37 |
| SPECIAL ANALYSIS | 41 |
| ELECTRONIC PRINCIPLES TRAINING | 46 |
| IMPLICATIONS | 46 |

TABLE OF CONTENTS
(Tables, Figures, Appendices)

| | <u>PAGE NUMBER</u> |
|--|------------------------|
| TABLE 1 - SAMPLE DISTRIBUTION | 4 |
| TABLE 2 - PAYGRADE DISTRIBUTION OF SURVEY SAMPLE. | 4 |
| TABLE 3 - DISTRIBUTION OF TIME SPENT ACROSS DUTIES BY MEMBERS IN CAREER LADDER JOBS (RELATIVE PERCENT OF JOB TIME SPENT). | 7 |
| TABLE 4 - SELECTED BACKGROUND DATA FOR CAREER LADDER. | 9 |
| TABLE 5 - COMPARISON OF MAJOR JOBS BETWEEN SURVEYS. | 16 |
| TABLE 6 - DISTRIBUTION OF SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOB AREAS. | 18 |
| TABLE 7 - TIME SPENT ON DUTIES BY MEMBERS OF SKILL-LEVEL GROUPS (RELATIVE PERCENT OF JOB TIME) | 19 |
| TABLE 8 - REPRESENTATIVE TASKS PERFORMED BY DAFSC 46630 PERSONNEL | 20 |
| TABLE 9 - REPRESENTATIVE TASKS PERFORMED BY DAFSC 46650 PERSONNEL | 21 |
| TABLE 10 - TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 46630 AND DAFSC 46650 PERSONNEL (PERCENT MEMBERS PERFORMING) | 22 |
| TABLE 11 - REPRESENTATIVE TASKS PERFORMED BY DAFSC 46670 PERSONNEL | 23 |
| TABLE 12 - TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 46650 AND DAFSC 46670 PERSONNEL (PERCENT MEMBERS PERFORMING) | 24 |
| TABLE 13 - REPRESENTATIVE TASKS PERFORMED BY DAFSC 46690/CEM PERSONNEL | 26 |
| TABLE 14 - TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 46670 AND DAFSC 46690/CEM PERSONNEL (PERCENT MEMBERS PERFORMING) | 27 |
| TABLE 15 - RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES BY FIRST- ENLISTMENT AFSC 466X0 PERSONNEL. | 29 |
| TABLE 16 - REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT AFSC 466X0 PERSONNEL. | 30 |
| TABLE 17 - EQUIPMENT ITEMS USED BY MORE THAN 30 PERCENT OF FIRST- ENLISTMENT AFSC 466X0 PERSONNEL. | 31 |
| TABLE 18 - SELECTED TASKS RATED HIGHEST IN TRAINING EMPHASIS | 34 |
| TABLE 19 - SELECTED TASKS RATED HIGHEST IN TASK DIFFICULTY | 35 |
| TABLE 20 - REPRESENTATIVE TASKS NOT REFERENCED TO STS 466X0. | 36 |
| TABLE 21 - ELEMENTS OF POI C3ABR46630 000 NOT SUPPORTED BY SURVEY DATA | 38 |
| TABLE 22 - REPRESENTATIVE TASKS NOT REFERENCED TO POI C3ABR46630 000 | 40 |
| TABLE 23 - COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 466X0 TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE (PERCENT MEMBERS RESPONDING) | 42 |
| TABLE 24 - COMPARISON OF JOB SATISFACTION INDICATORS FOR MEMBERS OF THE AFSC 466X0 CAREER LADDER JOBS (PERCENT MEMBERS RESPONDING). | 43 |
| TABLE 25 - COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 466X0 TAFMS GROUPS TO PREVIOUS SURVEY OF AFSC 411X0B (PERCENT MEMBERS RESPONDING). | 44 |
| TABLE 26 - UTILIZATION OF SEI 809 CERTIFIED MEMBERS AND FORMER AFSC 316X2T (NUMBER RESPONDING) | 45 |
| FIGURE 1 - AFSC 466X0 CAREER LADDER STRUCTURE. | 6 |
| FIGURE 2 - AFSC 466X0 FIRST ENLISTMENT | 32 |

TABLE OF CONTENTS (CONTINUED)
(Tables, Figures, Appendices)

| | <u>PAGE NUMBER</u> |
|--|------------------------|
| APPENDIX A - SELECTED REPRESENTATIVE TASKS PERFORMED BY MEMBERS OF CAREER LADDER JOBS | 47 |
| APPENDIX B - UNSUPPORTED AFSC 466X0 STS ELEMENTS | 48 |
| APPENDIX C - SUMMARY OF STS 466X0 ELECTRONIC PRINCIPLES USED ON THE JOB. | 49 |

PREFACE

This report presents the results of an Air Force Occupational Survey of the Air Launched Missile Systems career ladder (AFSC 466X0). Authority for conducting occupational surveys is contained in AFR 35-2. Computer products used in this report are available for use by operations and training officials. Chief Master Sergeant Wendell L. Beaty, Inventory Development Specialist, developed the survey instrument; Second Lieutenant Blair W. Conroy, Occupational Analyst, analyzed the data and wrote the final report. Ms Rebecca R. Hernandez provided computer programming support and Mr Richard G. Ramos provided administrative support. Major Randall C. Agee, Chief, Airman Analysis Section, Occupational Analysis Flight, USAF Occupational Measurement Squadron, reviewed and approved this report for release.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to the USAF Occupational Measurement Squadron, 1550 5th Street East, Attention: Chief, Occupational Analysis Flight (OMY), Randolph Air Force Base, Texas 78150-4449 (DSN 487-6623).

JAMES L. ANTENEN, Lt Col, USAF
Commander
USAF Occupational Measurement
Squadron

JOSEPH S. TARTELL
Chief, Occupational Analysis Flight
USAF Occupational Measurement
Squadron

SUMMARY OF RESULTS

1. Survey Coverage: Survey results are based on 588 respondents from AFSC 466X0, representing 74 percent of the eligible population. This is the first Occupational Survey Report (OSR) for this newly renamed AFSC. It was created under the auspices of Rivet Workforce, when AFSC 411X0B/C was renamed and AFSC 411X0C was deleted with the retirement of the Ground Launched Cruise Missile System. The latest study prior to the 31 October 1989 restructure is the OSR of the Air Launched Missile Systems Maintenance career ladder, AFSC 411X0B/C, published in April 1988.
2. Career Ladder Structure: Structure analysis identified two job clusters and five independent job types. Personnel in the Missile Maintenance cluster comprise 51 percent of the sample and perform a wide variety of technical tasks. The five independent jobs identified vary from administrative support and management to highly technical electronics maintenance.
3. Career Ladder Progression: Personnel in the Air Launched Missile Systems career ladder show a typical pattern of career ladder progression. Three-skill level personnel perform essentially technical tasks; 5-skill levels show a moderate shift toward supervisory functions with members still spending more than half of their job time performing technical duties. Seven-skill level personnel spend the majority of their duty time performing managerial and supervisory functions, with a smaller percentage of time dedicated to technical duties. The 9-skill levels and chief enlisted managers are the top level managers performing supervisory and administrative tasks almost exclusively. Specialty descriptions in AFR 39-1 provide a broad and accurate overview of tasks and duties performed within the career ladder.
4. Training Analysis: A match of survey data to the AFSC 466X0 Specialty Training Standard (STS) identified 70 line items on the STS not supported by survey data. A similar match of data to the Plan of Instruction (POI) for the C3ABR46630 000 course revealed that eight POI learning objectives are not supported. Career ladder functional managers and training personnel should carefully review these unsupported STS and POI items to justify their continued inclusion in the training documents.
5. Job Satisfaction Analysis: Overall, AFSC 466X0 respondents are satisfied with their jobs. When compared to other mission equipment maintenance personnel surveyed in 1992, AFSC 466X0 personnel show relatively lower job satisfaction. When compared to the 1988 (AFSC 411X0B/C) OSR, survey data reveal little or no change in job satisfaction among AFSC 466X0 career ladder respondents. A comparison between major jobs identified in the current sample reveals that members in the Munitions Controller job have the highest level of job satisfaction, while personnel in the Support Equipment Maintenance job are the least satisfied.
6. Implications: The AFSC 466X0 career ladder structure identified in this report is similar to that found in the previous 1988 (AFSC 411X0B/C) OSR. The AFR 39-1 job descriptions accurately describe the jobs and tasks performed by personnel at all skill levels, and overall satisfaction was positive for the

jobs identified. Analysis of the training documents indicates that both the STS and POI contain a number of unsupported areas which should be reviewed to determine if inclusion in future revisions of these documents is warranted.

OCCUPATIONAL SURVEY REPORT (OSR)
AIR LAUNCHED MISSILE SYSTEMS CAREER LADDER
(AFSC 466X0)

INTRODUCTION

This is a report of an occupational survey of the Air Launched Missile Systems career ladder conducted by the Occupational Analysis Flight, USAF Occupational Measurement Squadron. The Technical Training Operations Directorate of Headquarters, Air Education Training Command, Randolph AFB TX, requested this survey to review the classification, training, and personnel utilization of this career ladder subsequent to its creation under Rivet Workforce. Previous surveys pertaining to this career ladder were published prior to the retirement of the Ground Launched Cruise Missile System (AFSC 411X0C). The last OSR was dated April 1988. This survey is the first for the newly renamed AFSC.

Background

As described in the AFR 39-1 Specialty Descriptions for AFSC 466X0, 3- and 5-skill level members perform on- and off-equipment maintenance on strategic bomber-launched missiles, missile subsystems, missile integration systems, and related test, support, and handling equipment. They also operate, maintain, and calibrate automatic and manual test equipment. Seven-skill level members supervise on- and off-equipment maintenance on strategic bomber-launched missiles, missile subsystems, and related test, support, and handling equipment. They also maintain inspection and maintenance records while supervising maintenance activities. Nine-skill level members and chief enlisted managers (CEMs) superintend maintenance activities engaged in on- and off-equipment of air launched missile systems and support or test equipment. They plan, direct, and inspect maintenance functions.

Initial 3-skill level training for AFSC 466X0 personnel is provided through courses at Chanute AFB IL. Entry into the career ladder currently requires an Armed Forces Vocational Aptitude Battery (ASVAB) Electrical 67 and a strength factor of G or 40 lbs.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) AFPT 90-466-965, dated November 1991. A tentative task list was prepared after reviewing pertinent career ladder publications and

LIMITED DISTRIBUTION; FURTHER DISSEMINATION ONLY AS DIRECTED BY
HQ SAC/LGWN, 9 OCT 91, OR HIGHER DOD AUTHORITY

directives, and tasks from the Specialty Training Standard (STS) dated April 1991. The preliminary task list was refined and validated through personal interviews with 24 subject-matter experts (SMEs) at the following units:

| <u>BASE</u> | <u>UNIT VISITED</u> |
|--------------------|------------------------------------|
| Chanute AFB IL | 3340th Technical Training Group |
| Carswell AFB TX | 7th Missile Maintenance Squadron |
| Dyess AFB TX | 96th Field Maintenance Squadron |
| K.I. Sawyer AFB MI | 410th Missile Maintenance Squadron |
| Offutt AFB NE | HQ Strategic Air Command |

The units selected were recommended by MAJCOM Functional Managers for visit based on their particular missile maintenance activities.

The resulting JI contained a listing of 608 tasks grouped under 12 duty headings. A background section requested information such as grade, job title, time in present job, time in service, job satisfaction, and equipment maintained in performance of the incumbent's job.

Survey Administration

From February through July 1992, Military Personnel Flights (formerly CBPOs) at operational bases nationwide administered the inventory to all eligible DAFSC 466X0 personnel. Members eligible for the survey consisted of the total assigned population, excluding the following: (1) hospitalized personnel; (2) personnel in transition for a permanent change of station; (3) personnel retiring during the time inventories were administered to the field; and (4) personnel in their jobs less than 6 weeks. Participants were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Human Resources Directorate, Armstrong Laboratory, Brooks AFB TX.

Each individual who completed the inventory first filled in an identification and biographical information section, then identified each task they performed in their current job by placing a check mark by those tasks. After identifying all tasks performed, each individual rated each task on a 9-point scale showing relative time spent on that task compared to all other tasks identified. Ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount spent).

To determine relative time spent for each task identified by a respondent, all the incumbent's ratings are assumed to account for 100 percent of that member's time spent on the job and are summed. Each task rating is then divided by the total number of task ratings and multiplied by 100 to

provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percentage of time spent on a particular task.

Survey Sample

Personnel participating in this survey were selected to ensure an accurate representation across bases and paygrades. The 588 respondents in the final sample represent 74 percent of all eligible AFSC 466X0 personnel. Tables 1 and 2 reflect the distribution of the sample across paygrades. As shown by this table, the survey sample accurately reflects an overall AFSC 466X0 population.

Task Factor Administration

Job descriptions alone may not provide sufficient data for making decisions concerning career ladder documents or training programs. Task factor information is routinely collected as part of an occupational survey to provide a more complete analysis of the career ladder. To obtain required task factor data, selected senior AFSC 466X0 personnel (generally E-6 or E-7 technicians) also completed a second booklet for either training emphasis or task difficulty. These booklets were processed separately from the job inventories. This information is used in a number of analyses discussed in more detail within this report.

Task Difficulty (TD). TD is defined as an estimate of the length of time the average airman takes to learn how to perform a task. Thirty-eight experienced NCOs rated the difficulty of the inventory tasks on a 9-point scale ranging from 1 (easy to learn) to 9 (difficult to learn). Interrater agreement was acceptable. TD ratings are normally adjusted so tasks of average difficulty have a value of 5.0, with a standard deviation of 1.0. Thus, any task with a TD rating of 6.00 or above is considered difficult to learn.

Training Emphasis (TE). TE is defined as the amount of structured training first-enlistment personnel need to perform tasks successfully. Structured training is defined as training provided by resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal on-the-job training (OJT), or any other organized training method. Fifty-one experienced AFSC 466X0 NCOs rated the tasks in the inventory on a 10-point scale ranging from 0 (no training required) to 9 (extremely high amount of training required). The interrater agreement for these 51 raters was acceptable. The average TE rating is 1.83, with a standard deviation of 1.34. Any task with a TE rating of 3.17 or greater is considered to have a high TE.

When used in conjunction with the primary criterion of percent members performing, TD and TE ratings can provide insight into first-term personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting AFS entry-level jobs.

TABLE 1
SAMPLE DISTRIBUTION

TOTAL ASSIGNED = 920
 TOTAL ELIGIBLE = 796
 TOTAL IN SAMPLE = 588
 PERCENT OF ASSIGNED IN SAMPLE = 64%
 PERCENT OF ELIGIBLE IN SAMPLE = 74%

TABLE 2
PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

| <u>PAYGRADE</u> | <u>PERCENT OF ASSIGNED</u> | <u>PERCENT OF SAMPLE</u> |
|-----------------|--------------------------------|------------------------------|
| E-1 to E-3 | 26 | 25 |
| E-4 | 25 | 30 |
| E-5 | 23 | 24 |
| E-6 | 11 | 10 |
| E-7 | 10 | 7 |
| E-8 | 3 | 3 |
| E-9 | 1 | 1 |

SPECIALTY JOBS (Career Ladder Structure)

The first step in the analysis process is to identify the structure of the career ladder in terms of the jobs performed by the respondents. Comprehensive Occupational Data Analysis Programs (CODAP) assist by creating individual job descriptions for each respondent based on the tasks performed and relative amount of time spent on the tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, new members are added to this initial group, or new groups are formed based on the similarity of tasks and time spent ratings. This process continues until all respondents possible are included in a group.

The basic group used in the hierarchical clustering process is the job. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a cluster. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

Overview of Specialty Jobs

Based on the similarity of tasks performed and the amount of time spent performing each task, two clusters and five jobs were identified within the survey sample. Figure 1 illustrates the division of jobs performed by AFSC 466X0 personnel. A listing of these jobs is provided below. Table 3 presents the relative time spent by respondents in each duty for each job, while Table 4 shows selected background information for each job. The stage (STG) number shown beside each title references computer-printed information; the letter ("N") stands for the number of personnel in each group.

- I. MISSILE MAINTENANCE CLUSTER (STG043, N=300)
- II. SUPPLY JOB (STG058, N=26)
- III. SUPPORT EQUIPMENT MAINTENANCE JOB (STG075, N=15)
- IV. ELECTRONIC EQUIPMENT MAINTENANCE JOB (STG085, N=56)
- V. MUNITIONS CONTROLLER JOB (STG148, N=20)
- VI. MISSILE ANALYST JOB (STG073, N=17)
- VII. MISSILE MAINTENANCE MANAGEMENT CLUSTER (STG039, N=81)

AFSC 466X0
CAREER LADDER STRUCTURE

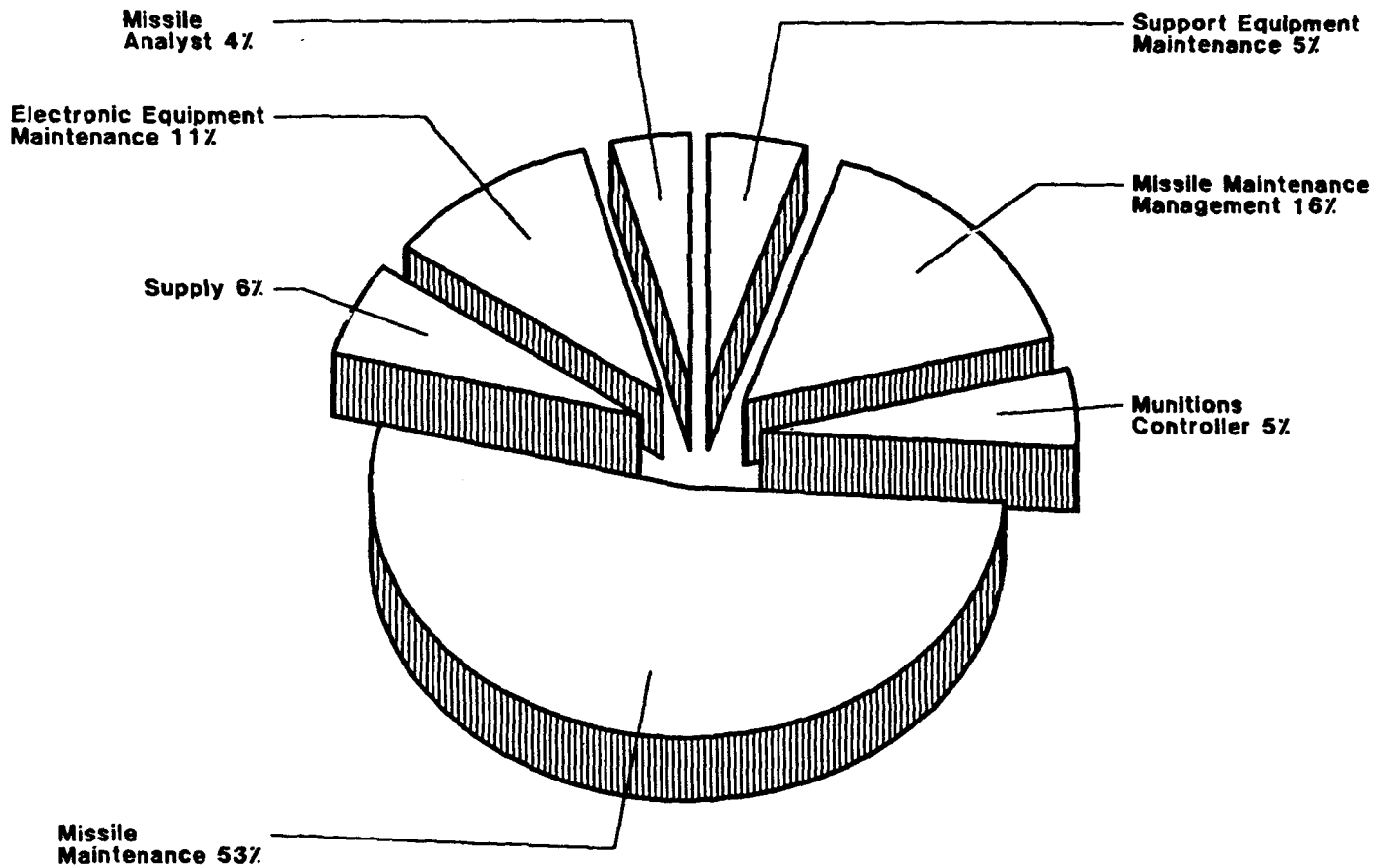


FIGURE 1

TABLE 3

DISTRIBUTION OF TIME SPENT ACROSS DUTIES BY MEMBERS IN CAREER LADDER JOBS
(RELATIVE PERCENT OF JOB TIME SPENT)

| DUTIES | MISSILE MAINTENANCE CLUSTER (N=300) | SUPPLY (N=26) | SUPPORT EQUIPMENT MAINTENANCE (N=15) | ELECTRONIC EQUIPMENT MAINTENANCE (N=56) |
|---|--|------------------|---|--|
| A ORGANIZING AND PLANNING | 1 | 6 | 3 | 2 |
| B DIRECTING AND IMPLEMENTING | 3 | 7 | 3 | 2 |
| C INSPECTING AND EVALUATING | 2 | 9 | 2 | 3 |
| D TRAINING | 2 | 2 | * | 1 |
| E PERFORMING ADMINISTRATIVE FUNCTIONS | 10 | 54 | 21 | 14 |
| F PERFORMING GENERAL MISSILE MAINTENANCE ACTIVITIES | 27 | 19 | 42 | 20 |
| G MAINTAINING MISSILE MECHANICAL SUPPORT EQUIPMENT | 5 | 3 | 26 | 3 |
| H MAINTAINING MISSILE ELECTRIC OR ELECTRONIC SUPPORT EQUIPMENT | 2 | * | 2 | 53 |
| I MAINTAINING AIRCRAFT PYLONS OR ROTARY LAUNCHERS | 7 | 0 | 0 | * |
| J MAINTAINING AGM-69A MISSILES | 21 | 0 | * | * |
| K MAINTAINING AGM-86B MISSILES | 16 | 0 | 0 | * |
| L MAINTAINING AGM-129A MISSILES | 1 | 0 | * | * |

* Denotes less than 1 percent

TABLE 3 (CONTINUED)

DISTRIBUTION OF TIME SPENT ACROSS DUTIES BY MEMBERS IN CAREER LADDER JOBS
(RELATIVE PERCENT OF JOB TIME SPENT)

| DUTIES | MUNITIONS CONTROLLER (N=20) | MISSILE ANALYST (N=17) | MISSILE MAINTENANCE MANAGEMENT CLUSTER (N=81) |
|---|-----------------------------------|------------------------------|---|
| A ORGANIZING AND PLANNING | 11 | 9 | 18 |
| B DIRECTING AND IMPLEMENTING | 36 | 19 | 21 |
| C INSPECTING AND EVALUATING | 4 | 13 | 19 |
| D TRAINING | 1 | 3 | 7 |
| E PERFORMING ADMINISTRATIVE FUNCTIONS | 47 | 56 | 29 |
| F PERFORMING GENERAL MISSILE MAINTENANCE | * | * | 3 |
| G MAINTAINING MISSILE MECHANICAL SUPPORT EQUIPMENT | 0 | 0 | * |
| H MAINTAINING MISSILE ELECTRIC OR ELECTRONIC SUPPORT EQUIPMENT | 0 | 0 | * |
| I MAINTAINING AIRCRAFT PYLONS OR ROTARY LAUNCHERS | 0 | 0 | * |
| J MAINTAINING AGM-69A MISSILES | 0 | 0 | * |
| K MAINTAINING AGM-86B MISSILES | 0 | 0 | 0 |
| L MAINTAINING AGM-129A MISSILES | 0 | 0 | 0 |

* Denotes less than 1 percent

TABLE 4

SELECTED BACKGROUND DATA FOR CAREER LADDER

| | MISSILE MAINTENANCE CLUSTER | SUPPLY | SUPPORT EQUIPMENT MAINTENANCE | ELECTRONIC EQUIPMENT MAINTENANCE |
|-----------------------------------|-----------------------------------|--------|-------------------------------------|--|
| NUMBER IN GROUP | 300 | 26 | 15 | 56 |
| PERCENT OF SAMPLE | 51% | 4% | 3% | 9% |
| PERCENT IN CONUS | 97% | 96% | 100% | 98% |
| DAFSC DISTRIBUTION | | | | |
| 46630 | 32% | 0 | 20% | 5% |
| 46650 | 56% | 81% | 73% | 59% |
| 46670 | 12% | 19% | 7% | 36% |
| 46690 | 0 | 0 | 0 | 0 |
| 46600 | 0 | 0 | 0 | 0 |
| PAYGRADE DISTRIBUTION | | | | |
| E-1 to E-3 | 42% | 0 | 33% | 5% |
| E-4 | 33% | 54% | 47% | 36% |
| E-5 | 21% | 27% | 20% | 45% |
| E-6 | 4% | 12% | 0 | 13% |
| E-7 | 2% | 8% | 0 | 2% |
| E-8 | 0 | 0 | 0 | 0 |
| E-9 | 0 | 0 | 0 | 0 |
| AVERAGE NUMBER OF TASKS PERFORMED | 120 | 55 | 41 | 172 |
| AVERAGE MONTHS TAFMS | 59 | 106 | 60 | 94 |
| PERCENT IN FIRST ENLISTMENT | 50% | 12% | 67% | 8% |
| PERCENT SUPERVISING | 36% | 46% | 20% | 46% |

* Denotes less than 1 percent

TABLE 4 (CONTINUED)
SELECTED BACKGROUND DATA FOR CAREER LADDER JOBS

| | MUNITIONS CONTROLLER | MISSILE ANALYST (STG73) | MISSILE MAINTENANCE MANAGEMENT CLUSTER (STG39) |
|-----------------------------------|-------------------------|-------------------------------|--|
| NUMBER IN GROUP | 20 | 17 | 81 |
| PERCENT OF SAMPLE | 3% | 3% | 14% |
| PERCENT IN CONUS | 100% | 100% | 99% |
| DAFSC DISTRIBUTION | | | |
| 46630 | 0 | 0 | 0 |
| 46650 | 85% | 82% | 10% |
| 46670 | 15% | 18% | 63% |
| 46690 | 0 | 0 | 16% |
| 46600 | 0 | 0 | 11% |
| PAYGRADE DISTRIBUTION | | | |
| E-1 to E-3 | 15% | 12% | 0 |
| E-4 | 55% | 53% | 0 |
| E-5 | 30% | 24% | 11% |
| E-6 | 0 | 6% | 28% |
| E-7 | 0 | 6% | 33% |
| E-8 | 0 | 0 | 20% |
| E-9 | 0 | 0 | 7% |
| AVERAGE NUMBER OF TASKS PERFORMED | | | |
| AVERAGE TAFMS (MOS) | 35 | 20 | 74 |
| PERCENT IN FIRST ENLISTMENT | 70 | 86 | 205 |
| PERCENT SUPERVISING | 25% | 24% | 0 |
| | 10% | 24% | 79% |

Respondents performing these jobs account for 87 percent of the survey sample. The remaining 13 percent were performing tasks or series of tasks which did not group with any of the defined jobs. Two examples include 5 junior respondents performing mostly guard duties and 10 respondents in the non-technical job area that only perform an average of 18 tasks. Based on the number of tasks performed, both of these jobs are limited compared to other jobs in the ladder.

Group Descriptions

The following paragraphs contain brief descriptions of the two clusters and five jobs identified through the career ladder structure analysis. Appendix A lists representative tasks for each group.

I. MISSILE MAINTENANCE CLUSTER (STG043, N=300). The jobs in this cluster deal with the major technical aspects of the career ladder. Members of this cluster are involved with cleaning, testing, transporting, and storing the missiles they support. This is shown by the amount of time they spend on duties such as General Missile Maintenance (27 percent), Maintaining AGM-69A (21 percent), and Maintaining AGM-86B (16 percent). The amount of time spent in these duties is higher than for any other job (see Table 3). These jobs are also fairly broad as members perform an average of 120 tasks that deal with maintaining specific weapons systems. The following are typical tasks members perform:

- clean missile surfaces
- inspect equipment for corrosion
- evaluate damage to missile surfaces
- perform AGM-69A missile role transfer procedures
- perform AGM-86B missile hoist transfer procedures
- safetywire equipment
- pack or unpack missile components

There are four job variations. The first deals exclusively with maintaining the AGM-69A missile. This job involves an average of 125 maintenance tasks dealing with the Short Range Attack Missile. The only tasks not performed involve calibration and testing of internal electronic components, such as the cooling control unit (CCU). While most members hold the 5- or 7-skill level, they are relatively inexperienced, as they average 4 years' time in the field. More than 75 percent are in their first enlistment.

The second job variation is AGM-86B, Maintenance. Members with this job repair missile surfaces, check engine performance, and transport the weapons. They have slightly more time in the service than those maintaining the AGM-69A missile. Total active federal military service (TAFMS) is 5 years and 3 months for this job.

The third variation, AGM-86B, Maintenance Shop Supervisor job, is performed by eight respondents, comprising little more than 1 percent of the sample. This is the broadest job in the survey, as members perform an average of 175 technical and supervisory tasks. They spend 27 percent of their time in technical duties and more than 30 percent in administration, counselling, tracking forms and reviewing forms, and completing EPRs. Members reported supervising an average of seven subordinates. Members of this job variation are predominantly E-5 with 8 years or more experience. Five members hold the 5-skill level, and three hold the 7-skill level.

The final variation of the cluster is the Pylon and Rotary Launcher Maintenance job. The 6 respondents in this job perform an average of 50 tasks, making it one of the most limited jobs in the sample. Members work with pylons for the AGM-86B almost exclusively. They perform missile transfers, as well as surface inspections and other general missile maintenance activities. All but one hold the rank of E-4, and two-thirds hold the 5-skill level. They have an average experience level of 4 years' active military service, making them the most junior respondents in the survey.

II. SUPPLY JOB (STG058, N=26). Supply is a limited job, compared to the breadth of the Missile Maintenance cluster. These 26 incumbents perform an average of 55 tasks, which entail tracking supply logs and equipment issue logs. The members of this job also fill out and track a variety of forms, such as equipment issue and supply logs. Members with this job are distinguished by the time they spend performing the following representative tasks:

- make entries on AF Forms 2005 (Issue/Turn-in Request)
- coordinate bench stock or supply requirements
- inventory equipment, tools, or supplies
- review AF Forms 2005 (Issue/Turn-in Request)
- review AFTO Forms 350 (Repair Item Processing Tag)
- make entries on AF Forms 2413 (Supply Control Log)

Fourteen of the twenty-six members of this job hold the rank of E-4. Twenty-one hold the 5-skill level. The average time in military service is 106 months.

III. SUPPORT EQUIPMENT MAINTENANCE JOB (STG075, N=15). The Support Equipment Maintenance job is also rather limited, as members perform an average of 41 tasks. Support equipment maintenance involves spending large amounts of time on general missile maintenance, support equipment maintenance, and administrative functions. Members are responsible for mechanical components of test equipment, such as missile test stands, guided-missile hydraulic fluid maintenance kits, and nitrogen charging adaptor kits. Members perform tasks such as the following:

- clean missile support equipment
- perform corrosion control procedures
- remove or replace nonelectronic support equipment
 - mechanical components
- inspect equipment on receipt
- remove or replace gaskets, seals, or packing
- inventory equipment, tools, or supplies

Eleven of the fifteen members with this job hold the 5-skill level, 7 are in paygrade E-4, and they average 60 months' TAFMS.

IV. ELECTRONIC EQUIPMENT MAINTENANCE JOB (STG085, N=56). The Electronic Equipment Maintenance job is the broadest in the ladder, involving an average of more than 170 tasks. The bulk of this job deals with maintaining electronic system test stands (ESTS) and other electronic components used in all phases of missile system testing and deployment. This includes a variety of calibrations and functional trouble shooting of cooling units, radar assemblies, and indicator lights or gauges. Typical tasks performed by members with the job include:

- clean electronic test equipment
- perform ESTS operational assurance tests
- align missile radar altimeter test assembly (MRATA) radio frequency (RF) circuits
- perform ESTS confidence tests
- perform self-tests on MRATAs
- align ESTS disc-drive adjustable parameters
- perform MRATA calibration factor loading procedures
- functionally test cooling control units (CCUs)
- calibrate MRATA power supplies
- perform fault isolations on MRATA active RF-control and
 - monitor components

Personnel with this job hold the rank of E-4 or E-5, average 94 months in military service, and hold either the 5- or 7-skill level.

V. MUNITIONS CONTROLLER JOB (STG148, N=20). The 20 AFSC 466X0 personnel with this job work essentially outside their specialty. They perform an average of 35 tasks dealing with tracking equipment and munitions, and monitoring the maintenance status of the different weapons systems and their supporting elements. They spend 47 percent of their time on duties dealing with general administrative tasks. Personnel with this focused job are distinguished by the time they spend on the following tasks:

- track equipment, weapons, or munitions movements
- monitor status of equipment, missiles, or munitions
- initiate maintenance work orders
- monitor status or work orders
- update status boards, such as items awaiting maintenance or parts
- direct movement of equipment

Eleven of the twenty respondents with this job hold the rank of E-4. The average time in service for members is 70 months, making them a somewhat experienced group. Seventeen members hold the 5-skill level, and three hold a 7-skill level.

VI. MISSILE ANALYST JOB (STG73, N=17). The Missile Analyst job is performed by the fewest respondents in the sample. This job also involves fewer tasks than any other job. Members with this job do mainly administrative duties as they record maintenance histories and analyze trends in the status of weapons systems. They are distinguished by the time they spend performing the following tasks:

- initiate or make entries on AFTO Forms 95 (Significant Historical Data)
- compile data for reports or staff studies
- monitor status of equipment, missiles, or munitions
- analyze maintenance trends
- update configuration status and accounting systems

More junior personnel perform this job. Eleven of the seventeen are in the paygrade E-4, and 14 hold the 5-skill level.

VII. MISSILE MAINTENANCE MANAGEMENT CLUSTER (STG039, N=81). The 81 incumbents in the Missile Maintenance Management cluster are grouped into three distinct job variations. All three variations share the common element of personnel management responsibilities. Seventy-nine percent reported that their jobs involve supervising others. Representative tasks performed by members of this cluster include:

- determine work priorities
- interpret directives, policies, or procedures for subordinates
- conduct briefings or meetings
- determine requirements for equipment, personnel, space, or supplies
- counsel personnel on personal or military-related matters

evaluate subordinates for compliance with performance standards
plan maintenance activities

The most senior personnel in the ladder perform these jobs, as members have an average of 14 years' TAFMS, and 63 percent hold the 7-skill level. There are subtle differences among these particular jobs. The emphasis of the jobs shifts from personnel management to program management as members move up the seniority ladder through the three jobs.

The tasks performed by members of the Shift Supervisor job, the first variation, are almost exclusively administrative in nature. Members assign maintenance tasks to personnel, review maintenance documentation, and directly supervise between 1 and 18 members. As with the other variations of this cluster, few, if any, technical tasks are performed. Members holding this job oversee the day-to-day operations of maintenance shops. Eight of the twelve members in this job hold the 7-skill level, and the predominant paygrade is E-6.

The second job variation is the Maintenance Superintendent job, which is the broadest management job variation. Maintenance Superintendents perform even more administrative tasks than the Shift Supervisors, as they spend more time interpreting regulations and maintenance directives. These respondents are also more senior, averaging 14 years' TAFMS, and more experienced, as most are in paygrade E-7.

The final job variation of the cluster is the Senior Manager job. Fifty percent of respondents' time is dedicated to planning, policy making, and resource utilization plans. The predominant paygrades are E-6 through E-8 and an average experience level of 16 years, making this the job most senior personnel perform.

Comparison of Current Job Structure to Previous Study

An OSR of the Missile Systems Maintenance (AFSC 411X0B/C) career ladder was last completed in April 1988. As mentioned previously, this AFSC was changed through Rivet Workforce in October 1989. The current sample includes AFSC 411X0B personnel; however, the C shred was deleted.

Table 5 lists the major jobs identified in the 1988 survey and current study. A review of the 1988 structure indicates that most of the jobs could be matched to similar jobs performed by current sample respondents. Overall, both clusters and all five jobs have an equivalent counterpart in the previous study. It is important to mention that the addition of the AGM-129A Advanced Cruise Missile System was in limited deployment at the time of the survey; therefore, it did not show up as a major part of these results. Conversations with Training Development personnel revealed that the limited deployment of the AGM-129A will continue, thus maintaining the low level of responses to related tasks.

TABLE 5
COMPARISON OF MAJOR JOBS BETWEEN SURVEYS

| <u>CURRENT SURVEY AFSC 466X0 (N=588)</u> | <u>1988 SURVEY AFSC 411X0B/C (N=672)</u> |
|--|--|
| Missile Maintenance Cluster Support Equipment Maintenance Job | Missile Systems Checkout Cluster |
| Supply Job | Maintenance Supply Technicians |
| Electronic Equipment Maintenance Job | Verification and Checkout of Equipment (VACE) |
| Munitions Controller | Munitions Controller |
| Missile Analyst Job | Missile Maintenance Analysis |
| Missile Maintenance Management Cluster | AF/HQ Managers Section NCOIC Personnel |
| Not Identified in Current Survey | GLCM Personnel Cluster |

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may be used to evaluate how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the STS, reflect what career ladder personnel are actually doing in the field.

The distribution of skill-level groups across the career ladder jobs is displayed in Table 6, while Table 7 offers another perspective by displaying percent time spent on each duty across the skill-level groups.

A typical pattern of progression is noted within the AFSC 466X0 career ladder, with personnel at the 3- and 5-skill levels spending most of their time on technical tasks. More relative time is spent on duties involving supervisory, managerial, and administrative tasks (see Table 7, Duties A, B, C, D, and E) as they move upward to the 7- and 9-skill levels.

Skill-Level Descriptions

DAFSC 46630. The 3-skill level, as an entry-level technical job, places most of its members in the Missile Maintenance cluster (see Table 6) performing general maintenance on both the AGM-69A and AGM-86B weapons systems. This is shown by the representative tasks listed in Table 8, most of which deal with repairing surfaces, inspecting equipment, and replacing components. Eighteen percent of the sample hold the 3-skill level.

DAFSC 46650. Five-skill level jobs require more experience and expertise and involve more advanced skills than the 3-levels. As Tables 6 and 7 show, over half the 5-skill levels are in the Missile Maintenance cluster. The Electronic Equipment Maintenance job holds 10 times as many 5-skill levels as 3-skill levels. In addition, the 5-skill level members begin to have Maintenance Management responsibilities. This shift in expertise is shown by representative tasks listed in Table 9. Note the administrative tasks not seen in 3-skill level tasks and the training functions. The basic difference between the 3- and 5-skill levels is that the 5-skill levels do everything the 3-skill levels do plus their supervisory tasks. This is best illustrated in the differentiating tasks list in Table 10.

DAFSC 46670. Seven-skill level jobs involve both technical and management responsibilities. Table 6 shows a greater percentage of incumbents performing Maintenance Management than general maintenance. Time spent on duties (Table 7) and representative tasks such as planning leave, conducting meetings, and writing recommendations for awards (Table 11) show the move away from purely technical responsibilities to supervisory and administrative. This shift is clearly shown by figures in Table 12, where a higher percentage of 5-skill levels perform technical tasks at the top, and a higher percentage of 7-skill levels perform supervisory and management tasks at the bottom. The 7-skill level respondents represent 25 percent of the sample.

TABLE 6

DISTRIBUTION OF SKILL-LEVEL MEMBERS
ACROSS CAREER LADDER JOB AREAS

| JOBS | PERCENT MEMBERS | | | |
|--|------------------|------------------|------------------|--------------------|
| | 46630 (N=106) | 46650 (N=307) | 46670 (N=148) | 46690/00 (N=27) |
| MISSILE MAINTENANCE CLUSTER | 89 | 55 | 24 | 0 |
| SUPPLY | 0 | 7 | 3 | 0 |
| SUPPORT EQUIPMENT MAINTENANCE | 0 | 4 | * | 0 |
| ELECTRONIC EQUIPMENT MAINTENANCE | 3 | 11 | 13 | 0 |
| MUNITIONS CONTROLLER | 3 | 6 | 2 | 0 |
| MISSILE ANALYST | 0 | 5 | 2 | 0 |
| MISSILE MAINTENANCE MANAGEMENT CLUSTER | 0 | 2 | 34 | 79 |
| NOT GROUPED (N=73) | 5 | 10 | 22 | 21 |

* Denotes less than 1 percent

TABLE 7
TIME SPENT ON DUTIES BY MEMBERS OF SKILL-LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)

| DUTIES | 46630 (N=106) | 46650 (N=307) | 46670 (N=148) | 46690/00 (N=27) |
|---|------------------|------------------|------------------|--------------------|
| A ORGANIZING AND PLANNING | * | 3 | 11 | 22 |
| B DIRECTING AND IMPLEMENTING | * | 7 | 14 | 21 |
| C INSPECTING AND EVALUATING | 1 | 4 | 12 | 25 |
| D TRAINING | * | 3 | 6 | 4 |
| E PERFORMING ADMINISTRATIVE FUNCTIONS | 7 | 22 | 27 | 25 |
| F PERFORMING GENERAL MISSILE MAINTENANCE | 33 | 23 | 10 | 2 |
| G MAINTAINING MISSILE MECHANICAL SUPPORT EQUIPMENT | 6 | 4 | 2 | * |
| H MAINTAINING MISSILE ELECTRIC OR ELECTRONIC SUPPORT EQUIPMENT | 3 | 7 | 8 | * |
| I MAINTAINING AIRCRAFT PYLONS OR ROTARY LAUNCHERS | 6 | 4 | 2 | 0 |
| J MAINTAINING AGM 69-A MISSILES | 28 | 10 | 4 | 0 |
| K MAINTAINING AGM 86-B MISSILES | 12 | 10 | 4 | 0 |
| L MAINTAINING AGM 129-A MISSILES | 2 | * | * | 0 |

* Denotes less than 1 percent

TABLE 8
REPRESENTATIVE TASKS PERFORMED BY DAFSC 46630 PERSONNEL

| TASKS | PERCENT MEMBERS PERFORMING (N=106) |
|--|---|
| F217 Inspect equipment or weapons for corrosion | 93 |
| F211 Clean missile surfaces | 92 |
| F207 Apply fillers, paints, sealers, or adhesives | 89 |
| F230 Perform corrosion control procedures | 88 |
| F222 Open or close alarmed facilities | 88 |
| F212 Evaluate damage to missile surfaces | 79 |
| F267 Safety-wire equipment | 78 |
| F228 Paint or stencil identifiers or instructions on equipment or weapons | 76 |
| F225 Pack or unpack missile components | 76 |
| J474 Perform AGM-69A missile roll transfer procedures | 75 |
| J470 Measure AGM-69A environmental control system (ECS) leakage rates | 75 |
| G273 Clean missile support equipment | 74 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | 73 |
| J471 Perform AGM-69A level 1 checkouts | 73 |
| J478 Perform fin locking or unlocking procedures | 73 |
| J473 Perform AGM-69A missile hoist transfer procedures | 71 |
| J513 Repair silicone insulation | 71 |
| F208 Authenticate alarmed facility openings or closings | 70 |
| J493 Remove or replace electronic-section shells | 70 |
| F215 Identify safety hazards | 70 |
| J468 Check rocket motor nitrogen pressure | 70 |
| J476 Perform control-section water accumulation checks | 69 |
| F249 Remove or replace bonding materials | 68 |
| J508 Remove or replace separation-ignition switch (SIS) detent pins | 68 |
| F256 Remove or replace gaskets, seals, or packing | 67 |
| F216 Inspect equipment on receipt | 66 |
| F229 Perform area defense guard duties | 66 |
| J487 Remove or replace C&GEs | 65 |
| F209 Check electro-explosive devices | 65 |
| J510 Remove or replace SISs | 66 |
| F237 Perform missile conditioned-air leak checks | 63 |
| F232 Perform escort duties | 63 |

TABLE 9
REPRESENTATIVE TASKS PERFORMED BY DAFSC 46650 PERSONNEL

| TASKS | PERCENT MEMBERS PERFORMING (N=307) |
|---|---|
| F222 Open or close alarmed facilities | 72 |
| F217 Inspect equipment or weapons for corrosion | 69 |
| F207 Apply fillers, paints, sealers, or adhesives | 68 |
| F230 Perform corrosion control procedures | 67 |
| E136 Make entries on AF Forms 2432 (Key Issue Log) | 65 |
| E196 Update CAMS data | 61 |
| F216 Inspect equipment on receipt | 60 |
| F267 Safetywire equipment | 60 |
| F215 Identify safety hazards | 59 |
| F210 Clean electronic test equipment | 58 |
| E150 Make entries on AFTO Forms 350 (Reparable Item Processing Tag) | 58 |
| F211 Clean missile surfaces | 57 |
| E156 Make entries on DD Forms 1574 (Serviceable Tag - Materiel) | 57 |
| F212 Evaluate damage to missile surfaces | 55 |
| G273 Clean missile support equipment | 54 |
| E131 Make entries on AF Forms 2005 (Issue/Turn-in Request) | 54 |
| F228 Paint or stencil identifiers or instructions on equipment or weapons | 54 |
| F229 Perform area defense guard duties | 53 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | 53 |
| F232 Perform escort duties | 53 |
| F208 Authenticate alarmed facility openings or closings | 52 |
| F256 Remove or replace gaskets, seals, or packing | 52 |
| F225 Pack or unpack missile components | 51 |
| E160 Make entries on DD Forms 1577-2 (Unserviceable (Reparable) Tag - Materiel) | 51 |
| E147 Make entries on AFTO Forms 244 (Industrial/Support Equipment Record) | 46 |
| E159 Make entries on DD Forms 1577 (Unserviceable (Condemned) Tag - Materiel) | 45 |
| E167 Monitor status of equipment, missiles, or munitions | 45 |
| F252 Remove or replace electrical cables or connectors | 45 |
| D88 Conduct QJT | 43 |
| F237 Perform missile conditioned-air leak checks | 43 |
| H336 Perform ESTS confidence tests | 43 |
| F245 Perform weapons systems time compliance technical order (TCTO) modifications | 42 |

TABLE 10

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC
46630 AND DAFSC 46650 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 46630 (N=106) | 46650 (N=307) | DIFFERENCE |
|---|------------------|------------------|------------|
| J470 Measure AGM-69A environmental control system (ECS) leakage rates | 75 | 32 | 43 |
| J513 Repair silicone insulation | 71 | 30 | 41 |
| J471 Perform AGM-69A level 1 checkouts | 73 | 32 | 41 |
| J478 Perform fin locking or unlocking procedures | 73 | 32 | 41 |
| J474 Perform AGM-69A missile roll transfer procedures | 75 | 35 | 40 |
| J493 Remove or replace electronic-section shells | 70 | 31 | 39 |
| J473 Perform AGM-69A missile hoist transfer procedures | 71 | 32 | 39 |
| J510 Remove or replace SISs | 66 | 28 | 38 |
| D88 Conduct QJT | 8 | 43 | -36 |
| C55 Conduct performance feedback worksheet (PFW) sessions | 0 | 35 | -35 |
| C80 Write EPRs | 0 | 35 | -35 |
| B24 Assign maintenance tasks to personnel | 1 | 35 | -34 |
| B31 Counsel personnel on personal or military-related matters | 1 | 33 | -32 |
| D92 Counsel trainees on training progress | 0 | 28 | -28 |
| A5 Determine work priorities | 6 | 34 | -28 |
| D86 Certify personnel for task performance | 0 | 27 | -27 |

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY DAFSC 46670 PERSONNEL

| TASKS | PERCENT MEMBERS PERFORMING |
|--|----------------------------------|
| A5 Determine work priorities | 70 |
| C80 Write EPRs | 69 |
| C55 Conduct performance feedback worksheet (PFW) sessions | 66 |
| E167 Monitor status of equipment, missiles, or munitions | 64 |
| B31 Counsel personnel on personal or military-related matters | 62 |
| C81 Write recommendations for awards or decorations | 59 |
| E196 Update CAMS data | 59 |
| B42 Interpret directives, policies, or procedures for subordinates | 58 |
| C67 Evaluate subordinates for compliance with performance standards | 57 |
| B25 Assign maintenance tasks to personnel | 54 |
| A11 Establish performance standards for subordinates | 53 |
| B45 Supervise Air Launched Missile Systems Specialists (AFSC 46650) | 52 |
| E168 Monitor status of work orders | 50 |
| C56 Conduct self-inspection programs | 50 |
| E131 Make entries on AF Forms 2005 (Issue/Turn-in Request) | 50 |
| A4 Determine requirements for equipment, personnel, space, or supplies | 49 |
| E136 Make entries on AF Forms 2432 (Key Issue Log) | 49 |
| E156 Make entries on DD Forms 1574 (Serviceable Tag - Materiel) | 49 |
| E150 Make entries on AFTO Forms 350 (Reparable Item Processing Tag) | 49 |
| B41 Initiate maintenance work orders | 48 |
| A24 Schedule leaves or passes | 48 |
| F217 Inspect equipment or weapons for corrosion | 47 |
| A9 Develop work methods or procedures | 47 |
| F215 Identify safety hazards | 46 |
| B52 Write recommendations for changes in procedures | 45 |
| E178 Review AFTO Forms 244 (Industrial/Support Equipment Record) | 45 |
| E130 Make entries on AF Forms 1800 (Operator's Inspection Guide and Trouble Report (General Purpose Vehicles)) | 45 |
| E129 Make entries on AF Forms 1297 (Temporary Issue Receipt) | 45 |
| D88 Conduct OJT | 45 |
| E147 Make entries on AFTO Forms 244 (Industrial/Support Equipment Record) | 45 |
| C73 Inventory equipment, tools, or supplies | 43 |
| B27 Conduct briefings or meetings | 43 |

TABLE 12

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC
46650 AND DAFSC 46670 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 46650 (N=307) | 46670 (N=148) | DIFFERENCE |
|---|------------------|------------------|------------|
| F207 Apply fillers, paints, sealers, or adhesives | 68 | 33 | 35 |
| F222 Open or close alarmed facilities | 72 | 39 | 32 |
| F230 Perform corrosion control procedures | 67 | 35 | 32 |
| F228 Paint or stencil identifiers or instructions on equipment or weapons | 54 | 24 | 31 |
| F211 Clean missile surfaces | 57 | 27 | 30 |
| F229 Perform area defense guard duties | 53 | 24 | 29 |
| F267 Safetywire equipment | 60 | 31 | 29 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | 53 | 26 | 27 |
| A24 Schedule leaves or passes | 7 | 48 | -41 |
| C81 Write recommendations for awards or decorations | 21 | 59 | -39 |
| A5 Determine work priorities | 34 | 70 | -37 |
| C80 Write EPRs | 35 | 69 | -34 |
| C56 Conduct self-inspection programs | 16 | 50 | -34 |
| B27 Conduct briefings or meetings | 11 | 44 | -33 |
| A16 Plan meetings or briefings | 4 | 36 | -32 |
| A19 Plan work assignments | 18 | 50 | -32 |

DAFSC 46690/CEM. The job of the more senior members requires almost no technical involvement, but focuses on management activities. Nine-skill level and CEM respondents reported spending nearly 70 percent of their time on duties involving directing, organizing, and inspecting of maintenance programs and personnel (see Table 7). This is shown by their representative tasks performed, such as planning layouts of facilities and writing staff studies (Table 13) and by distinguishing tasks listed in Table 14. At this high skill level, members are separated from the 7-skill level mainly by an increase in planning and policy-making responsibilities. Also, the 7-skill levels are more involved with direct supervision of maintenance technicians.

Summary

Normal career ladder progression within the AFSC 466X0 career ladder is evident, with personnel at the 3-skill level spending the vast majority of their job time performing technical tasks. A moderate shift towards supervisory functions occurs at the 5-skill level, with members still spending more than 50 percent of their duty time performing technical functions. Personnel at the 7-skill level primarily perform supervisory functions, although they still spend nearly a third of their time on technical duties. The 9-skill level members and CEMs spend 95 percent of their time on the nontechnical duties such as planning, organizing, directing, and inspecting.

ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS

Survey data were compared to the AFR 39-1 Specialty Descriptions for Missile Systems Maintenance Specialists and Technicians, dated 15 March 1991, effective 30 April 1991. The descriptions for the 3-, 5-, 7-, and 9-/CEM-skill levels were generally accurate, depicting the highly technical aspects of the job, as well as the increase in supervisory responsibilities previously described in the DAFSC analysis. The descriptions also capture the primary responsibilities of members in the five jobs identified by the job structure analysis process.

TRAINING ANALYSIS

Occupational survey data are sources of information which can be used to assist in the development of relevant training programs for military personnel. Factors used to evaluate entry-level Missile Systems Maintenance training include jobs being performed by first-enlistment personnel, overall distribution of first-enlistment personnel across career ladder jobs, percent of first-job (1-24 month TAFMS) and first-enlistment (1-48 months TAFMS) members performing specific tasks or using specific equipment items, ratings of how much TE tasks should receive in formal training, and ratings of relative TD.

TABLE 13
REPRESENTATIVE TASKS
PERFORMED BY DAFSC 46690/CEM PERSONNEL

| TASKS | PERCENT MEMBERS PERFORMING |
|--|----------------------------------|
| A16 Plan meetings or briefings | 85 |
| A10 Establish organizational policies, operating instructions (OIs), or standing operating procedures (SOPs) | 85 |
| E204 Write messages or correspondences | 81 |
| B27 Conduct briefings or meetings | 81 |
| B26 Compile data for reports or staff studies | 78 |
| A4 Determine requirements for equipment, personnel, space, or supplies | 74 |
| E120 Edit reports or correspondence | 74 |
| B52 Write recommendations for changes in procedures | 74 |
| A5 Determine work priorities | 74 |
| C78 Review inspection reports | 74 |
| A20 Establish performance standards for subordinates | 74 |
| A14 Plan layouts of facilities | 70 |
| A9 Develop work methods or procedures | 70 |
| B29 Coordinate munitions maintenance activities with other units or agencies | 70 |
| C69 Evaluate technical data | 67 |
| E167 Monitor status of equipment, missiles, or munitions | 67 |
| A13 Establish publication or technical order (TO) requirements | 67 |
| B42 Interpret directives, policies, or procedures for subordinates | 67 |
| C53 Analyze maintenance trends | 67 |
| A15 Plan maintenance activities | 67 |
| C68 Evaluate suggestions | 67 |
| B32 Direct administrative functions | 67 |
| C60 Evaluate equipment modification data | 63 |
| C57 Evaluate contractor services or products | 63 |
| E206 Write staff studies or surveys | 63 |
| A3 Determine budget or financial requirements | 63 |
| C62 Evaluate inspection procedures | 63 |
| C59 Evaluate equipment development data | 59 |
| B35 Direct movement of equipment | 59 |
| C67 Evaluate subordinates for compliance with performance standards | 59 |
| A12 Establish procedures for control or access to facilities, munitions, or munitions storage areas | 59 |
| C81 Write recommendations for awards or decorations | 56 |

TABLE 14

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC
46670 AND DAFSC 46690/CEM PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 46670 (N=148) | 46690/CEM (N=27) | DIFFERENCE |
|--|------------------|---------------------|------------|
| E196 Update CAMS data | 59 | 7 | 52 |
| E136 Make entries on AF Forms 2432 (Key Issue Log) | 49 | 7 | 42 |
| E150 Make entries on AFTO Forms 350 (Reparable Item Processing Tag) | 49 | 7 | 41 |
| E156 Make entries on DD Forms 1574 (Serviceable Tag - Materiel) | 49 | 7 | 41 |
| E131 Make entries on AF Forms 2005 (Issue/Turn in Request) | 50 | 11 | 39 |
| B45 Supervise Air Launched Missile Systems Specialists (AFSC 46650) | 52 | 15 | 37 |
| D88 Conduct OJT | 45 | 7 | 37 |
| F217 Inspect equipment or weapons for corrosion | 47 | 11 | 36 |
| A14 Plan layouts of facilities | 10 | 74 | -64 |
| A10 Establish organizational policies, operating instructions (OIs), or standing operating procedures (SOPs) | 31 | 85 | -54 |
| A20 Review equipment or personnel utilization policy changes | 21 | 74 | -53 |
| E206 Write staff studies or surveys | 13 | 63 | -50 |
| E120 Edit reports or correspondence | 24 | 74 | -50 |
| A16 Plan meetings or briefings | 36 | 85 | -49 |
| C59 Evaluate equipment development data | 11 | 59 | -48 |
| A13 Establish publication or technical order (TO) requirements | 18 | 67 | -48 |

First-Enlistment Personnel

In this study, there are 189 members in their first enlistment (1-48 months TAFMS), representing 32 percent of the survey sample. As displayed in Table 15, approximately 94 percent of their duty time is devoted to technical or administrative task performance, the majority of which is contained in four duties: performing general missile maintenance functions (30 percent); maintaining AGM-69A missiles (22 percent); administrative and supply functions (13 percent); and maintaining AGM-86B missiles (13 percent). The vast majority of first-enlistment personnel are involved in day-to-day missile systems maintenance activities. Included are inspecting weapons for corrosion, evaluating missile surface damage, and performing AGM-69A missile hoist transfer procedures. Table 16 displays the tasks performed by first-enlistment personnel. Table 17 displays equipment items used by 30 percent or more of first-job and first-enlistment personnel.

Within the clusters and jobs identified in the SPECIALTY JOBS section of this report, first-term personnel were present in all five jobs and one of the clusters. As shown in Figure 2, 79 percent of first-term personnel surveyed are grouped in the Missile Maintenance cluster.

TE and TD Data

TE and TD data are secondary factors that can help technical school personnel decide which entry-level training tasks to emphasize. These ratings, based on the judgments of senior career ladder NCOs at operational units, provide training personnel with a rank-ordering of those tasks considered important for first enlistment training (TE) and a measure of the difficulty of those tasks (TD). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors (TE and TD), accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-term personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To assist technical school personnel, USAFOMS has developed a computer program that incorporates these secondary factors and the percentage of first-enlistment personnel performing each task into a value identified as an Automated Training Indicator (ATI). These ATI values correspond to training decisions listed and defined in the Training Decision Logic Table found in Attachment 1, ACR 52-22. These values allow course personnel to quickly focus their attention on those tasks which are most likely to qualify for ABR course consideration.

TABLE 15
RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES BY
FIRST-ENLISTMENT AFSC 466X0 PERSONNEL

| <u>DUTIES</u> | <u>466X0 1-48 MOS TAFMS (N=189)</u> |
|---|---|
| A ORGANIZING AND PLANNING | 1 |
| B DIRECTING AND IMPLEMENTING | 2 |
| C INSPECTING AND EVALUATING | 1 |
| D TRAINING | * |
| E PERFORMING ADMINISTRATIVE FUNCTIONS | 13 |
| F PERFORMING GENERAL MISSILE MAINTENANCE | 30 |
| G MAINTAINING MISSILE MECHANICAL SUPPORT EQUIPMENT | 6 |
| H MAINTAINING MISSILE ELECTRIC/ELECTRONIC SUPPORT EQUIPMENT | 3 |
| I MAINTAINING AIRCRAFT PYLONS OR ROTARY LAUNCHERS | 6 |
| J MAINTAINING AGM-69A MISSILES | 22 |
| K MAINTAINING AGM-86B MISSILES | 13 |
| L MAINTAINING AGM-129A MISSILES | 1 |

* Denotes less than 1 percent

TABLE 16
REPRESENTATIVE TASKS PERFORMED BY
FIRST-ENLISTMENT AFSC 466X0 PERSONNEL

| TASKS | PERCENT MEMBERS PERFORMING (N=189) |
|--|---|
| F217 Inspect equipment or weapons for corrosion | 85 |
| F222 Open or close alarmed facilities | 83 |
| F211 Clean missile surfaces | 81 |
| F207 Apply fillers, paints, sealers, or adhesives | 81 |
| F230 Perform corrosion control procedures | 80 |
| F267 Safetywire equipment | 73 |
| F212 Evaluate damage to missile surfaces | 72 |
| F228 Paint or stencil identifiers or instructions on equipment or weapons | 70 |
| F225 Pack or unpack missile components | 68 |
| G273 Clean missile support equipment | 68 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | 67 |
| F210 Clean electronic test equipment | 67 |
| F215 Identify safety hazards | 64 |
| F229 Perform area defense guard duties | 63 |
| F216 Inspect equipment on receipt | 63 |
| F256 Remove or replace gaskets, seals, or packing | 62 |
| F208 Authenticate alarmed facility openings or closings | 60 |
| J474 Perform AGM-69A missile roll transfer procedures | 59 |
| F237 Perform missile conditioned-air leak checks | 59 |
| E136 Make entries on AF Forms 2432 (Key Issue Log) | 58 |
| F249 Remove or replace bonding materials | 58 |
| F232 Perform escort duties | 58 |
| J470 Measure AGM-69A environmental control system (ECS) leakage rates | 58 |
| J478 Perform fin locking or unlocking procedures | 57 |
| J471 Perform AGM-69A level 1 checkouts | 57 |
| F209 Check electro-explosive devices | 56 |
| J473 Perform AGM-69A missile host transfer procedures | 56 |
| J468 Check rocket motor nitrogen pressure | 55 |
| J513 Repair silicone insulation | 55 |
| J493 Remove or replace electronic-section shells | 54 |
| J476 Perform control-section water accumulation checks | 54 |
| J487 Remove or replace C&GEs | 52 |

TABLE 17

EQUIPMENT ITEMS USED BY MORE THAN 30 PERCENT OF
FIRST-ENLISTMENT AFSC 466X0 PERSONNEL

| <u>EQUIPMENT ITEMS</u> | <u>PERCENT MEMBERS USING (N=189)</u> |
|---|--|
| Torque Wrenches | 88 |
| Hoists, Electric Overhead or Monorail Systems | 84 |
| Shorting Plugs | 80 |
| Missile Radar Alt Test Assemblies (MRATA) | 78 |
| Nitrogen Charging Adapter Sets | 78 |
| Nitrogen Servicing Cart | 76 |
| Torque Screwdrivers | 72 |
| Umbilical Spanner Wrenches | 71 |
| Static Grounds | 70 |
| Digital Multimeters | 66 |
| Test Sets, Electronic System (ESTS) | 62 |
| Pneumatic Tools | 60 |
| Sling Beams | 59 |
| Multimeters | 58 |
| Trailers | 57 |
| Pressure Gauges, Air | 55 |
| Crimping Tools | 54 |
| Balance Weight Sets | 53 |
| Templates | 53 |
| Test Sets, Igniter Circuit | 53 |
| Lift Trailers, ETU-77 | 52 |
| Air Data Test Sets, AN/GSM-291 | 52 |
| Test Adapter Groups | 52 |
| Missile Restraint Fixt (Saddle), MMU-124/E | 50 |
| Cradles, Adjust Missile Handling, MHU-70A/E | 49 |
| Generators, Facility | 48 |
| Guided Missile Maint. Stands, MHU-159/E | 48 |
| Oscilloscopes | 48 |
| Engine Leak Detectors, MXU-720/E | 47 |
| Barometers | 45 |
| Rail Sets | 45 |
| Test Sets, Squib, AN/GSM-267 | 42 |
| Test Stands, MSU-179/E | 41 |
| Umbilical Cover Restraint Kits | 41 |
| Air Compressors | 39 |
| Breakout Boxes | 39 |
| Desiccant Assembly Restraints, MSU-727/E | 38 |
| Fuel Priming Sets, GSU-288/E | 38 |
| Voltmeters, Digital | 38 |
| Trucks, 1-ton through 5-ton | 36 |
| Covers, Elec. Sect. Protective, CVU-114/E | 34 |
| Engine Handling Trucks, ETU-102/E | 34 |
| Tugs, MB4 Coleman | 33 |
| Launcher Rotation Tools | 31 |
| Wing Lock Pin Release Tools | 30 |

AFSC 466X0
FIRST ENLISTMENT

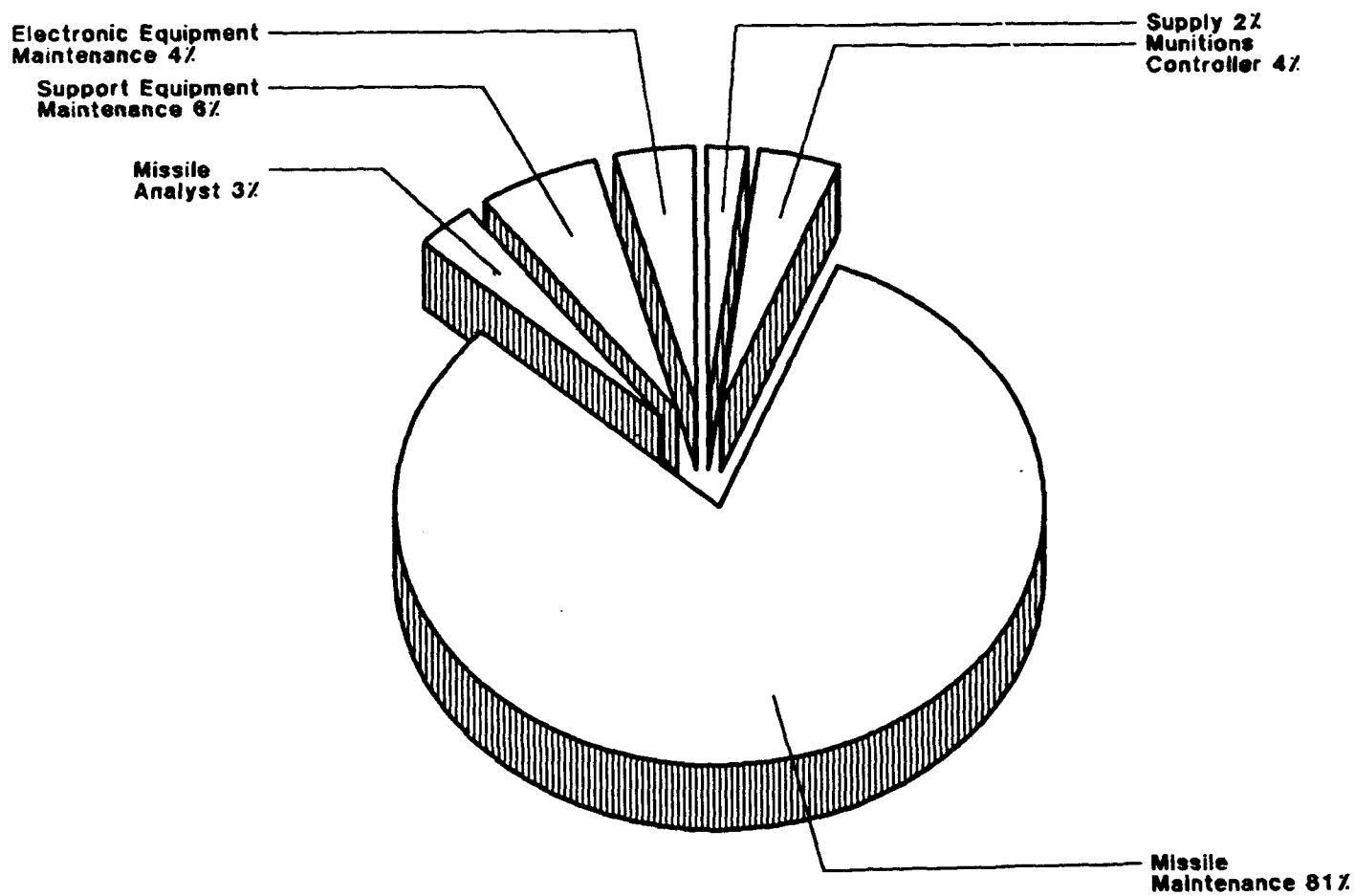


FIGURE 2

Tasks having the highest TE ratings are listed in Table 18. Included for each task are the percentage of first-job and first-enlistment personnel performing and the TD rating. As illustrated in Table 18, most of these tasks pertain to general missile maintenance functions.

Table 19 lists the tasks having the highest TD ratings. The percentage of first-enlistment, 5- and 7-skill level personnel performing, and TE rating are also included for each task. Most of the tasks listed in Table 19 fall into the electronic equipment maintenance duty. This explains the low percent members performing numbers, since only one job spends significant amounts of time in the duty. In addition to this minimal percent time spent factor, most of these tasks have a low TE rating.

Various lists of tasks, accompanied by TE and TD ratings, are contained in the TRAINING EXTRACT package and should be reviewed in detail by technical school personnel. For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the SURVEY METHODOLOGY section of this report.

Specialty Training Standard (STS)

A review of STS 466X0 was made by comparing survey data to STS elements. Technical school personnel from the Chanute Training Center matched job inventory tasks to appropriate STS sections and subsections. A complete computer listing displaying the percent members performing tasks, TE and TD ratings for each task, along with the STS matchings, has been forwarded to the technical school for their further review of training documents. STS elements were reviewed for TE, TD, and percent members performing information, as stipulated in ATCR 52-22, dated February 1989. STS paragraphs containing general knowledge information, subject-matter knowledge requirements, or supervisory responsibilities were not reviewed. Typically, STS elements matched to tasks performed by 20 percent or more personnel in appropriate experience or skill-level groups (such as first-job (1-24 months TAFMS), first-enlistment (1-48 months TAFMS), and 5- and 7-skill level groups), should be considered for inclusion in the STS. Likewise, elements matched to tasks performed by less than 20 percent of these groups should be considered for deletion from the STS. Approximately 76 line items on the STS were found to be unsupported by occupational survey data. Most of paragraphs 14, 15, and 17, dealing with the AGM-86B weapons system, the AGM-129A weapons system, and support equipment, are not supported.

There are several other paragraphs which require attention, among them are paragraph 9, Forms, Records, and Reports; paragraph 19, Aircraft Launcher Systems; and paragraph 20, Aircraft Pylon Systems. Training personnel and SMEs should review the unsupported line items to determine if inclusion in future revisions to the STS is warranted.

Tasks not matched to any element of the STS were reviewed to determine if there were any tasks concentrated around any particular functions or jobs. Examples of technical tasks performed by at least 20 percent of STS criteria groups, but which are not referenced to any STS element, are displayed in Table 20. These tasks deal with routine maintenance such as replacing bonding

TABLE 18

SELECTED TASKS RATED HIGHEST IN TRAINING EMPHASIS

| TASKS | TOT TE | 1ST JOB | 1ST ENL | TOT TD |
|---|-----------|------------|------------|-----------|
| F207 Apply fillers, paints, sealers, or adhesives | 6.31 | 85 | 81 | 4.15 |
| F231 Perform emergency shutdowns of test equipment | 5.94 | 47 | 47 | 3.32 |
| F212 Evaluate damage to missile surfaces | 5.80 | 77 | 72 | 5.38 |
| J471 Perform AGM-69A level 1 checkouts | 5.73 | 77 | 57 | 6.19 |
| J472 Perform AGM-69A level 2 checkouts | 5.47 | 62 | 49 | 6.40 |
| F217 Inspect equipment or weapons for corrosion | 5.45 | 94 | 85 | 4.70 |
| F230 Perform corrosion control procedures | 5.20 | 83 | 80 | 4.44 |
| F215 Identify safety hazards | 5.20 | 67 | 64 | 4.29 |
| F267 Safetywire equipment | 5.18 | 77 | 73 | 4.10 |
| F211 Clean missile surfaces | 5.14 | 91 | 81 | 3.14 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | | | | |
| J468 Check rocket motor nitrogen pressure | 5.06 | 72 | 67 | 4.11 |
| J513 Repair silicone insulation | 5.02 | 75 | 55 | 3.95 |
| J474 Perform AGM-69A missile roll transfer procedures | 5.02 | 75 | 54 | 4.42 |
| J478 Perform fin locking or unlocking procedures | 4.98 | 80 | 59 | 4.22 |
| I433 Perform decoder-receiver level 3 checkouts | 4.90 | 78 | 57 | 3.74 |
| J496 Remove or replace guidance sections | 4.90 | 46 | 50 | 5.58 |
| F210 Clean electronic test equipment | 4.86 | 59 | 47 | 6.07 |
| E196 Update CAMS data | 4.82 | 68 | 67 | 3.34 |
| J470 Measure AGM-69A environmental control system (ECS) leakage rates | 4.82 | 40 | 42 | 5.06 |
| | 4.82 | 80 | 58 | 4.50 |

TE MEAN = 1.83, S.D. = 1.34

TD MEAN = 5.00, S.D. = 1.00

TABLE 19

SELECTED TASKS RATED HIGHEST IN TASK DIFFICULTY

| TASKS | TOT ID | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | TOT TE |
|--|-----------|------------|------------|-----------|-----------|-----------|
| H303 Align missile radar altimeter test assembly (MRATA) radio frequency (RF) circuits | 8.22 | 1 | 3 | 12 | 15 | 1.86 |
| H349 Perform fault isolations on MRATA active RF-control and monitor components | 7.95 | 0 | 2 | 11 | 16 | 1.82 |
| H354 Perform fault isolations on MRATA RF-receiver assemblies | 7.73 | 0 | 1 | 10 | 14 | 1.45 |
| H352 Perform fault isolations on MRATA quartz- and passive-delay assemblies | 7.72 | 0 | 1 | 9 | 14 | 1.31 |
| H353 Perform fault isolations on MRATA RF-generating components | 7.70 | 0 | 1 | 11 | 15 | 1.45 |
| H351 Perform fault isolations on MRATA fixed- and stepped-attenuator assemblies | 7.53 | 0 | 1 | 10 | 14 | 1.51 |
| L594 Remove or replace AGM-129A wings | 7.48 | 0 | 0 | 1 | 2 | 1.16 |
| H350 Perform fault isolations on MRATA coaxial switch assemblies | 7.42 | 0 | 2 | 10 | 15 | 1.67 |
| H302 Align ESTS disc-drive adjustable parameters | 7.41 | 1 | 2 | 11 | 15 | 1.84 |
| D95 Develop resident course or career development course (CDC) curriculum materials | 7.17 | 0 | 0 | 1 | 1 | .06 |
| H341 Perform fault isolations on ESTS disc drives or controllers using diagnostic tapes | 7.16 | 1 | 2 | 10 | 14 | 1.78 |
| A3 Determine budget or financial requirements | 7.15 | 2 | 2 | 4 | 20 | .08 |
| H396 Remove or replace ESTS disc-drive fixed lower discs | 7.12 | 0 | 2 | 9 | 14 | 1.35 |
| H345 Perform fault isolations on ESTS IEEE-488 data buses using diagnostic tapes | 6.93 | 0 | 1 | 7 | 9 | 1.49 |
| H400 Remove or replace ESTS disc-drive spindle motor assemblies | 6.92 | 0 | 1 | 7 | 7 | .96 |
| A10 Establish organizational policies, operating instructions (OIs), or standing operating procedures (SOPs) | 6.92 | 2 | 2 | 7 | 31 | .10 |
| H346 Perform fault isolations on ESTSs using circuit card extenders | 6.91 | 0 | 1 | 9 | 11 | 1.55 |
| H304 Calibrate air data test systems (ADTSs) | 6.90 | 1 | 3 | 7 | 9 | 1.57 |
| B38 Implement emergency war order (EWO) plans | 6.86 | 1 | 2 | 4 | 11 | .24 |
| J501 Remove or replace raceway wire harnesses | 6.86 | 48 | 40 | 27 | 14 | 4.10 |

TE MEAN = 1.83, S.D. = 1.34

TD MEAN = 5.00, S.D. = 1.00

TABLE 20

REPRESENTATIVE TASKS NOT REFERENCED TO STS 466X0

| <u>TASKS</u> | <u>TNG</u> <u>EMP</u> | <u>ATI</u> | <u>1ST</u> <u>JOB</u> | <u>1ST</u> <u>ENL</u> | <u>5-</u> <u>LVL</u> | <u>7-</u> <u>LVL</u> | <u>TSK</u> <u>DIF</u> |
|--|--------------------------|------------|--------------------------|--------------------------|-------------------------|-------------------------|--------------------------|
| F217 Inspect equipment or weapons for corrosion | 5.45 | 18 | 94 | 85 | 69 | 47 | 4.70 |
| F215 Identify safety hazards | 5.20 | 18 | 67 | 64 | 59 | 46 | 4.29 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | 5.06 | 18 | 72 | 67 | 53 | 26 | 4.11 |
| J478 Perform fin locking and unlocking procedures | 4.90 | 18 | 78 | 57 | 32 | 17 | 3.74 |
| J493 Remove or replace electronic-section shells | 4.76 | 18 | 74 | 54 | 31 | 17 | 3.99 |
| F237 Perform missile conditioned-air leak checks | 4.43 | 18 | 63 | 59 | 43 | 18 | 4.53 |
| F249 Remove or replace bonding materials | 4.29 | 18 | 62 | 58 | 43 | 23 | 4.19 |
| J508 Remove or replace separation-ignition switch (SIS) detent pins | 4.18 | 13 | 70 | 53 | 31 | 15 | 2.71 |
| E150 Make entries on AFTO Forms 350 (Reparable Item Processing Tag) | 4.02 | 18 | 48 | 52 | 58 | 49 | 3.74 |
| J504 Remove or replace rate gyros | 3.88 | 18 | 65 | 51 | 30 | 16 | 3.92 |
| F219 Inspect safety devices, such as pins, chocks, or flags | 3.49 | 18 | 52 | 51 | 41 | 26 | 3.51 |
| F208 Authenticate alarmed facility openings or closings | 3.33 | 18 | 60 | 60 | 52 | 32 | 3.70 |

materials and inspection tasks such as identifying safety hazards. Training personnel and SMEs should review these and other unreferenced tasks to consider STS inclusion.

Plan of Instruction (POI)

Job inventory tasks were matched to related training objectives in POI C3ABR46630 000, dated 1 October 1991, with assistance from technical school SMEs. The method employed was similar to that of the STS analysis. A computer printout was created listing learning objectives, percent members performing data for first job (1-24 months TAFMS) and first-enlistment (1-48 months TAFMS) personnel, and TE, TD, and ATI ratings.

Tasks matched to POI learning objectives were compared to the standard set forth in Attachment 1, ATCR 52-22, dated 17 February 1989 (30 percent or more of the criterion groups performing tasks matched, along with sufficiently high TE and TD ratings on those tasks). Through this guidance, learning objectives taught in the course which are not supported by survey data should be considered for elimination from the formal course, if not justified on some other acceptable basis.

A review of survey data shows that eight learning objectives are not supported by OSR data. These objectives are listed in Table 21, along with the accompanying and survey data. The unsupported learning objectives are related to blocks which focus specifically on support equipment and the AGM-86B missile system. A comparison of the unsupported learning objectives to their respective STS line item references reveals a strong similarity between unsupported areas in both documents.

Many technical tasks performed by over 30 percent of first-enlistment personnel were not matched to the POI. Examples of these tasks with survey data are listed in Table 22. These tasks deal with the same routine maintenance as those listed in the STS section above. In addition to numbers of members performing these functions, several of these tasks are rated high in TE and TD. Training personnel and SMEs should review these and other unreferenced tasks to determine if training should be provided in the formal course.

JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can give career ladder managers a better understanding of factors that may affect the job performance of career ladder airmen. Therefore, the survey booklet included attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions. The responses of the current survey sample were then analyzed by making several comparisons: (1) among TAFMS groups of the AFSC 466X0 career ladder and a comparative sample of personnel from other Mission Equipment Maintenance career ladders surveyed in 1992 (AFSCs 305X4, 404X0, 411X0A, 452X5, 454X5,

TABLE 21

ELEMENTS OF POI C3ABR46630 000 NOT SUPPORTED BY
SURVEY DATA

| | TNG EMP | ATI | 1ST JOB | 1ST ENL | TSK DIF |
|--|------------|-----|------------|------------|------------|
| I 5g. Using a description of a simulated hazard and a blank AF Form 457, complete the hazard by correctly documenting at least 7 of 10 entries | | | | | |
| E139 Make entries on AF Forms 457 (USAF Hazard Report) | 3.57 | 11 | 21 | 24 | 3.17 |
| V 5d. Using an AGM-86B maintenance laboratory, technical data, and working as a team member, replace missile radar altimeter with no more than two minor errors | | | | | |
| K533 Remove or replace AGM-86B missile radar altimeters (MRAs) | 3.07 | 7 | 26 | 28 | 4.53 |
| VI 2b. Given technical data, determine the correct loaded AGM-86B pylon checkout procedures by selecting the correct response to at least two of three questions | | | | | |
| I431 Perform AGM-86B loaded pylon inertial navigation element (INE) autocalibration checkouts | 3.39 | 11 | 26 | 25 | 4.74 |
| VI 2g. Given technical data, determine the correct decoder-receiver repair procedures by selecting the correct response to at least two of three questions | | | | | |
| I455 Remove or replace decoder-receiver components | 4.00 | 11 | 19 | 29 | 5.15 |

TABLE 21 (CONTINUED)

ELEMENTS OF POI C3ABR46630 000 NOT SUPPORTED BY
SURVEY DATA

| | <u>TNG</u> <u>EMP</u> | <u>ATI</u> | <u>1ST</u> <u>JOB</u> | <u>1ST</u> <u>ENL</u> | <u>TSK</u> <u>DIF</u> |
|---|--------------------------|------------|--------------------------|--------------------------|--------------------------|
| VI 2h. Given technical data, determine the correct power control assembly replacement procedures by selecting the correct response to at least two of three questions | | | | | |
| I464 Remove or replace 180-inch multipurpose-launcher power-control assemblies | 1.80 | 2 | 7 | 8 | 4.98 |
| VI 2i. Given technical data, determine the correct transformer rectifier replacement procedures by selecting the correct response to at least two of three questions | | | | | |
| I465 Remove or replace 180-inch multipurpose-launcher transformer rectifiers | 1.47 | 2 | 6 | 7 | 4.95 |
| VI 2j. Given technical data, determine the correct power supply replacement procedures by selecting the correct response to at least two of three questions | | | | | |
| I463 Remove or replace 180-inch multipurpose-launcher power supplies | 1.71 | 2 | 9 | 11 | 4.93 |
| Vi 3a. Given technical data, determine the correct stores management panel checkout procedures by selecting the correct response to at least two of three questions | | | | | |
| F223 Operationally check B-1B control and display panels | 1.90 | 7 | 17 | 17 | 5.24 |

TABLE 22

REPRESENTATIVE TASKS NOT REFERENCED TO
POI C3ABR46630 000

| TASKS | TNG EMP | ATI | 1ST JOB | 1ST ENL | TSK DIF |
|---|------------|-----|------------|------------|------------|
| F217 Inspect equipment or weapons for corrosion | 5.45 | 18 | 94 | 85 | 4.70 |
| F215 Identify safety hazards | 5.20 | 18 | 67 | 64 | 4.29 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | 5.06 | 18 | 72 | 67 | 4.11 |
| J478 Perform fin locking and unlocking procedures | 4.90 | 18 | 78 | 57 | 3.74 |
| J493 Remove or replace electronic-section shells | 4.76 | 18 | 74 | 54 | 3.99 |
| F237 Perform missile conditioned-air leak checks | 4.43 | 18 | 63 | 59 | 4.53 |
| F249 Remove or replace bonding materials | 4.29 | 18 | 62 | 58 | 4.19 |
| J508 Remove or replace separation-ignition switch (SIS) detent pins | 4.18 | 13 | 70 | 53 | 2.71 |
| E150 Make entries on AFTO Forms 350 (Reparable Item Processing Tag) | 4.02 | 18 | 48 | 52 | 3.74 |
| J504 Remove or replace rate gyros | 3.88 | 18 | 65 | 51 | 3.92 |
| F219 Inspect safety devices, such as pins, chocks, or flags | 3.49 | 18 | 52 | 51 | 3.51 |
| F208 Authenticate alarmed facility openings or closings | 3.33 | 18 | 60 | 60 | 3.70 |

454X6, 463X0) (see Table 23); (2) across jobs identified in the specialty jobs section of the report (see Table 24); (3) between current and previous survey TAFMS groups (see Table 25). These comparative data give a relative measure of how the job satisfaction of AFSC 466X0 personnel compares with similar Air Force specialties. Air Launched Missile Systems personnel reported similar job satisfaction responses to members of the comparative sample. The first-enlistment AFSC 466X0 group, however, rated their job interest and sense of accomplishment lower than their counterparts. In addition, the career group rated their perceived use of talents higher than that of the comparative sample career group. Overall, satisfaction for all three TAFMS groups is still relatively high. The percentages of positive responses in these comparisons reflect a career ladder where personnel appear to be quite satisfied with their jobs.

An indication of changes in job satisfaction perceptions within the career ladder is provided in Table 25, which presents TAFMS group data for 1992 survey respondents and data from respondents to the last OSR of the career ladder in 1987 (AFSC 411X0B). Generally, perceptions associated with job satisfaction have changed very little when compared to the AFSC 411X0B sample. The first of two noteworthy changes is increase in perceived accomplishments across the board, as well as increase in the reenlistment indicator. The second is a decrease in perceived use of talents and training for all three TAFMS groups.

Table 24 presents job satisfaction data for the major jobs identified in the career ladder structure for AFSC 466X0. Examination of these data can reveal the influences of performing certain jobs on overall job satisfaction. Job satisfaction indicators for the specialty job groups suggest that members of the Electronic Equipment Maintenance and Munitions Controllers jobs are most satisfied. Only two of the seven specialty jobs indicated a low degree of satisfaction: Supply and the least satisfied group, Support Equipment Maintenance. It should be noted that these two jobs constitute less than 7 percent of the total survey sample.

SPECIAL ANALYSIS

As requested by the MAJCOM and functional manager, an analysis of SEI 809 qualified personnel and former AFSC 316X2T personnel was performed. As shown in Table 26, members holding the SEI 809 Electronics credential are spread across most jobs in the ladder, although their usage is primarily in Electronic Equipment Maintenance job. These data shows little or no cross-utilization of SEI 809 qualified members exists. We also find former AFSC 316X2T personnel in jobs besides electronics. However, there are few respondents (22 of 588) who held the former AFSC.

TABLE 23

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 466X0
TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE
(PERCENT MEMBERS RESPONDING)

| | <u>1-48 MONTHS TAFMS</u> | | <u>49-96 MONTHS TAFMS</u> | | <u>97+ MONTHS TAFMS</u> | |
|--|--------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|-----------------------------|
| | 466X0 (N=189) | COMP SAMPLE (N=3,272) | 466X0 (N=182) | COMP SAMPLE (N=2,917) | 466X0 (N=215) | COMP SAMPLE (N=6,421) |
| <u>EXPRESSED JOB INTEREST:</u> | | | | | | |
| INTERESTING | 64 | 74 | 59 | 72 | 73 | 75 |
| SO-SO | 23 | 16 | 25 | 17 | 17 | 16 |
| DULL | 13 | 10 | 16 | 11 | 10 | 9 |
| <u>PERCEIVED USE OF TALENTS:</u> | | | | | | |
| FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL | 71 29 | 75 20 | 72 27 | 71 20 | 82 18 | 75 18 |
| <u>PERCEIVED USE OF TRAINING:</u> | | | | | | |
| FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL | 75 25 | 85 14 | 75 25 | 81 19 | 71 28 | 79 21 |
| <u>SENSE OF WORK ACCOMPLISHMENT:</u> | | | | | | |
| SATISFIED | 68 | 73 | 69 | 71 | 72 | 72 |
| NEUTRAL | 15 | 12 | 13 | 11 | 11 | 10 |
| DISSATISFIED | 17 | 14 | 19 | 17 | 17 | 17 |
| <u>REENLISTMENT INTENTIONS:</u> | | | | | | |
| YES, OR PROBABLY YES | 66 | 58 | 75 | 70 | 72 | 75 |
| NO, OR PROBABLY NO | 34 | 41 | 25 | 30 | 6 | 7 |
| PLAN TO RETIRE | 0 | * | 0 | * | 22 | 18 |

* Denotes less than 1 percent

Comparative data are from AFSCs 305X4, 404X0, 411X0A, 452X5, 454X5, Mission Equipment Maintenance career ladders surveyed in 1992

TABLE 24

COMPARISON OF JOB SATISFACTION INDICATORS FOR MEMBERS OF
THE AFSC 466X0 CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)

| | MISSILE MAINT CLUSTER (N=300) | SUPPLY (N=26) | SUPPORT EQUIP MAINT (N=15) | ELEC EQUIP MAINT (N=56) | MUNITIONS CONTROLLER (N=20) | MISSILE ANALYST (N=17) | MISSILE MAINT MGT CLUSTER (N=81) |
|--------------------------------------|--|------------------|-------------------------------------|----------------------------------|-----------------------------------|------------------------------|--|
| <u>EXPRESSED JOB INTEREST:</u> | | | | | | | |
| INTERESTING | 61 | 62 | 33 | 75 | 95 | 59 | 86 |
| SO-SO | 22 | 27 | 47 | 18 | 5 | 29 | 12 |
| DULL | 17 | 11 | 20 | 5 | 0 | 12 | 1 |
| <u>PERCEIVED USE OF TALENTS:</u> | | | | | | | |
| FAIRLY WELL TO PERFECTLY | 73 | 65 | 40 | 82 | 85 | 83 | 92 |
| LITTLE OR NOT AT ALL | 27 | 35 | 60 | 16 | 15 | 17 | 7 |
| <u>PERCEIVED USE OF TRAINING:</u> | | | | | | | |
| FAIRLY WELL TO PERFECTLY | 80 | 50 | 27 | 89 | 65 | 59 | 77 |
| LITTLE TO NOT AT ALL | 20 | 50 | 73 | 9 | 35 | 41 | 23 |
| <u>SENSE OF WORK ACCOMPLISHMENT:</u> | | | | | | | |
| SATISFIED | 63 | 73 | 60 | 82 | 85 | 82 | 83 |
| NEUTRAL | 15 | 15 | 13 | 9 | 15 | 6 | 7 |
| DISSATISFIED | 22 | 12 | 27 | 9 | 0 | 12 | 10 |
| <u>REENLISTMENT INTENTIONS:</u> | | | | | | | |
| YES, OR PROBABLY YES | 72 | 85 | 67 | 80 | 70 | 71 | 56 |
| NO, OR PROBABLY NO | 26 | 8 | 33 | 16 | 30 | 24 | 6 |
| PLAN TO RETIRE | 1 | 8 | 0 | 4 | 0 | 6 | 38 |

TABLE 25

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 466X0 TAFMS
GROUPS TO PREVIOUS SURVEY OF AFSC 411X0B
(PERCENT MEMBERS RESPONDING)

| | <u>1-48 MONTHS TAFMS</u> | | <u>49-96 MONTHS TAFMS</u> | | <u>97+ MONTHS TAFMS</u> | |
|--|--------------------------|---------------------------|---------------------------|---------------------------|-------------------------|---------------------------|
| | 466X0 (N=189) | 1987 411X0B (N=239) | 466X0 (N=182) | 1987 411X0B (N=153) | 466X0 (N=215) | 1987 411X0B (N=188) |
| <u>EXPRESSED JOB INTEREST:</u> | | | | | | |
| INTERESTING | 64 | 63 | 59 | 67 | 73 | 74 |
| SO-SO | 23 | 18 | 25 | 21 | 17 | 14 |
| DULL | 13 | 18 | 16 | 11 | 10 | 11 |
| <u>PERCEIVED USE OF TALENTS:</u> | | | | | | |
| FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL | 71 29 | 69 30 | 72 27 | 72 28 | 82 18 | 79 21 |
| <u>PERCEIVED USE OF TRAINING:</u> | | | | | | |
| FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL | 75 25 | 75 24 | 75 25 | 71 28 | 71 28 | 71 29 |
| <u>SENSE OF WORK ACCOMPLISHMENT:</u> | | | | | | |
| SATISFIED | 68 | 58 | 69 | 63 | 72 | 66 |
| NEUTRAL | 15 | 18 | 13 | 8 | 11 | 9 |
| DISSATISFIED | 17 | 23 | 19 | 28 | 17 | 24 |
| <u>REENLISTMENT INTENTIONS:</u> | | | | | | |
| YES, OR PROBABLY YES | 66 | 52 | 75 | 59 | 72 | 77 |
| NO, OR PROBABLY NO | 34 | 46 | 25 | 41 | 6 | 14 |
| PLAN TO RETIRE | 0 | 0 | 0 | 0 | 22 | 8 |

TABLE 26

UTILIZATION OF SEI 809 CERTIFIED MEMBERS AND
FORMER AFSC 316X2T
(NUMBER RESPONDING)

| <u>SPECIALTY JOB</u> | <u>COURSE COMPLETION C3AZR46650 ALMSS</u> | <u>AWARDED SEI 809</u> | <u>FORMER 316X2T</u> |
|--|---|----------------------------|--------------------------|
| MISSILE MAINTENANCE CLUSTER (N=300) | 81 | 12 | 3 |
| SUPPLY JOB (N=26) | 9 | 5 | 3 |
| SUPPORT EQUIPMENT MAINTENANCE JOB (N=15) | 3 | 0 | 0 |
| ELECTRONIC EQUIPMENT MAINTENANCE JOB (N=56) | 40 | 46 | 12 |
| MUNITIONS CONTROLLER JOB (N=20) | 7 | 1 | 0 |
| MISSILE ANALYST JOB (N=17) | 2 | 2 | 0 |
| MISSILE MAINTENANCE MANAGEMENT CLUSTER (N=81) | 4 | 15 | 4 |

ELECTRONIC PRINCIPLES TRAINING

As requested by Technical Training, an analysis of the electronics portion of the STS was performed. Incumbents were asked to answer background questions concerning their use of electronic principles on the job. Appendix C lists the results displayed by year groups and the Electronics Equipment Maintenance job. First-enlistment personnel only reported using a few of the electronics principles: assembling crimp connectors and using multimeters and oscilloscopes. Electronic equipment maintenance job incumbents had a high response rate for all electronic principles; most principles drew responses above 80 percent. This shows how little the electronic principles are used by junior members and how extensively the principles are used by electronic equipment maintenance personnel.

IMPLICATIONS

As explained in the INTRODUCTION, this survey was conducted primarily to provide training personnel with current information on the Air Launched Missile Systems career ladder since its reorganization following Rivet Workforce. The present classification structure, as described by the AFR 39-1 Specialty Descriptions, accurately portrays the jobs in this study.

Analysis of career ladder documents indicates both the STS and POI contain a number of unsupported items and learning objectives. The unsupported areas in both documents appear to be closely related and should be reviewed to determine if their inclusion in future revisions of these documents is warranted.

No serious job satisfaction problems appear to exist within this specialty. Overall, job satisfaction responses have remained stable and are similar to the comparative sample of similar Air Force personnel surveyed in 1992.

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY
MEMBERS OF CAREER LADDER JOBS

TABLE A1
MISSILE MAINTENANCE CLUSTER
(STG043)

GROUP SIZE: 300
PERCENT OF SAMPLE: 51
PREDOMINANT PAYGRADE: E-3/E-4

AVERAGE TICF: 53 MONTHS
AVERAGE TAFMS: 59 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|--|----------------------------------|
| F211 Clean missile surfaces | 99 |
| F217 Inspect equipment or weapons for corrosion | 95 |
| F207 Apply fillers, paints, sealers, or adhesives | 92 |
| F230 Perform corrosion control procedures | 91 |
| F212 Evaluate damage to missile surfaces | 90 |
| F222 Open or close alarmed facilities | 90 |
| F267 Safetywire equipment | 88 |
| F225 Pack or unpack missile components | 87 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | 86 |
| F210 Clean electronic test equipment | 76 |
| G273 Clean missile support equipment | 75 |
| F215 Identify safety hazards | 75 |
| F237 Perform missile conditioned-air leak checks | 73 |
| F228 Paint or stencil identifiers or instructions on equipment or weapons | 73 |
| F208 Authenticate alarmed facility openings or closings | 72 |
| F216 Inspect equipment on receipt | 72 |
| I433 Perform decoder-receiver level 3 checkouts | 71 |
| F229 Perform area defense guard duties | 69 |
| F256 Remove or replace gaskets, seals, or packing | 69 |
| E136 Make entries on AF Forms 2432 (Key Issue Log) | 68 |
| F249 Remove or replace bonding materials | 67 |
| J468 Check rocket motor nitrogen pressure | 66 |
| J474 Perform AGM-69A missile roll transfer procedures | 66 |
| E150 Make entries on AFTO Forms 350 (Reparable Item Processing Tag) | 66 |
| F232 Perform escort duties | 64 |
| J471 Perform AGM-69A level 1 checkouts | 64 |
| J478 Perform fin locking or unlocking procedures | 64 |
| J470 Measure AGM-69A environmental control system (ECS) leakage rates | 64 |
| F209 Check electro-explosive devices | 63 |
| F270 Transport missiles on other than pylons or launchers | 63 |
| J476 Perform control-section water accumulation checks | 62 |

TABLE A2
AGM-69A MAINTENANCE
(STG081)

GROUP SIZE: 185
PERCENT OF SAMPLE: 31
PREDOMINANT PAYGRADE: E-3/E-4

AVERAGE TICF: 49 MONTHS
AVERAGE TAFMS: 53 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|---|----------------------------------|
| J470 Measure AGM-69A environmental control system (ECS) leakage rates | 99 |
| F211 Clean missile surfaces | 98 |
| J474 Perform AGM-69A missile roll transfer procedures | 98 |
| J471 Perform AGM-69A level 1 checkouts | 98 |
| J478 Perform fin locking or unlocking procedures | 98 |
| J513 Repair silicone insulation | 97 |
| J476 Perform control-section water accumulation checks | 96 |
| J487 Remove or replace C&GEs | 96 |
| J473 Perform AGM-69A missile hoist transfer procedures | 95 |
| J493 Remove or replace electronic-section shells | 95 |
| F217 Inspect equipment or weapons for corrosion | 95 |
| J508 Remove or replace separation-ignition switch (SIS) detent pins | 95 |
| F212 Evaluate damage to missile surfaces | 94 |
| J468 Check rocket motor nitrogen pressure | 94 |
| F207 Apply fillers, paints, sealers, or adhesives | 93 |
| F222 Open or close alarmed facilities | 93 |
| J491 Remove or replace DPCs | 92 |
| J475 Perform control and guidance electronics (C&GE) level 3 checkouts | 92 |
| J504 Remove or replace rate gyros | 92 |
| J483 Remove or replace AGM-69A power supplies | 91 |
| F230 Perform corrosion control procedures | 91 |
| J472 Perform AGM-69A level 2 checkouts | 91 |
| J480 Perform radar set level 3 checkouts | 90 |
| J510 Remove or replace SISs | 90 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | 90 |
| J503 Remove or replace radar sets | 90 |
| F225 Pack or unpack missile components | 89 |
| J497 Remove or replace gyro-stabilized platforms (GSPs) | 89 |
| F267 Safetywire equipment | 89 |
| J512 Repair phenolic surfaces | 89 |

TABLE A3

AGM-86B MAINTENANCE
(STG087)

GROUP SIZE: 94
 PERCENT OF SAMPLE: 16
 PREDOMINANT PAYGRADE: E-4

AVERAGE TICF: 53 MONTHS
 AVERAGE TAFMS: 63 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|---|----------------------------------|
| K516 Deploy AGM-86B aerosurfaces | 100 |
| F211 Clean missile surfaces | 99 |
| K524 Perform AGM-86B missile hoist transfer procedures | 99 |
| K545 Remove or replace engine desiccant assemblies | 99 |
| K522 Perform AGM-86B level 1 checkouts | 99 |
| K567 Stow AGM-86B aerosurfaces | 98 |
| K555 Remove or replace INEs | 98 |
| K531 Remove or replace AGM-86B engines | 97 |
| F217 Inspect equipment or weapons for corrosion | 96 |
| K564 Repair engine desiccant assemblies | 96 |
| K560 Remove or replace rotary switches | 95 |
| K557 Remove or replace nose caps | 95 |
| F207 Apply fillers, paints, sealers, or adhesives | 94 |
| K526 Perform INE autocalibrations on test stands | 93 |
| F230 Perform corrosion control procedures | 93 |
| K521 Perform AGM-86B engine fuel primings | 93 |
| K518 Leak check AGM-86B engines | 91 |
| K538 Remove or replace boattails | 91 |
| K549 Remove or replace fin housings | 89 |
| F212 Evaluate damage to missile surfaces | 89 |
| F222 Open or close alarmed facilities | 89 |
| K523 Perform AGM-86B level 2 checkouts | 88 |
| K519 Measure AGM-86B ECS leakage rates | 87 |
| F225 Pack or unpack missile components | 86 |
| F267 Safetywire equipment | 86 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | 86 |
| K553 Remove or replace guided-missile flight controllers (GMFCs) | 86 |
| K525 Perform AGM-86B radar absorbing material (RAM) repairs | 85 |
| K533 Remove or replace AGM-86B missile radar altimeters | 84 |
| K550 Remove or replace flight data transmitters | 82 |
| I436 Perform empty pylon checkouts | 80 |
| I441 Perform loaded AGM-86B pylon checkouts | 79 |

TABLE A4

AGM-86B SHOP SUPERVISOR
(STG072)

GROUP SIZE: 8
 PERCENT OF SAMPLE: 1
 PREDOMINANT PAYGRADE: E-5

AVERAGE TICF: 126 MONTHS
 AVERAGE TAFMS: 130 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|---|----------------------------------|
| B25 Assign maintenance tasks to personnel | 100 |
| B34 Direct maintenance activities | 100 |
| E196 Update CAMS data | 100 |
| C55 Conduct performance feedback worksheet (PFW) sessions | 100 |
| F217 Inspect equipment or weapons for corrosion | 100 |
| D88 Conduct OJT | 100 |
| G273 Clean missile support equipment | 100 |
| F215 Identify safety hazards | 100 |
| F267 Safetywire equipment | 100 |
| A5 Determine work priorities | 88 |
| A11 Establish performance standards for subordinates | 88 |
| B45 Supervise Air Launched Missile Systems Specialists (AFSC 46650) | 88 |
| B42 Interpret directives, policies, or procedures for subordinates | 88 |
| A15 Plan maintenance activities | 88 |
| F212 Evaluate damage to missile surfaces | 88 |
| B31 Counsel personnel on personal or military-related matters | 88 |
| C80 Write EPRs | 88 |
| D92 Counsel trainees on training progress | 88 |
| F207 Apply fillers, paints, sealers, or adhesives | 88 |
| F219 Inspect safety devices, such as pins, chocks, or flags | 88 |
| G279 Inspect MSU-179/E missile test stands | 88 |
| F211 Clean missile surfaces | 88 |
| F216 Inspect equipment on receipt | 88 |
| C67 Evaluate subordinates for compliance with performance standards | 88 |
| F230 Perform corrosion control procedures | 88 |
| E156 Make entries on DD Forms 1574 (Serviceable Tag-Material) | 88 |
| F237 Perform missile conditioned-air leak checks | 88 |
| G289 Remove or replace compressed-gas cylinders | 88 |
| F225 Pack or unpack missile components | 88 |
| F227 Pack supply turn-ins | 88 |
| I431 Perform AGM-86B loaded pylon inertial navigational element (INE) autocalibration checkouts | 88 |

TABLE A5

PYLON AND ROTARY LAUNCHER MAINTENANCE
(STG179)

GROUP SIZE: 6
PERCENT OF SAMPLE: 1
PREDOMINANT PAYGRADE: E-4

AVERAGE TICF: 47 MONTHS
AVERAGE TAFMS: 49 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|--|----------------------------------|
| K524 Perform AGM-86B missile hoist transfer procedures | 100 |
| I447 Perform post download inspections on AGM-86B loaded pylons | 100 |
| F243 Perform pylon transfer procedures | 100 |
| F211 Clean missile surfaces | 100 |
| I441 Perform loaded AGM-86B pylon checkouts | 100 |
| I436 Perform empty pylon checkouts | 100 |
| F217 Inspect equipment or weapons for corrosion | 100 |
| F222 Open or close alarmed facilities | 100 |
| F267 Safetywire equipment | 100 |
| F229 Perform area defense guard duties | 100 |
| F230 Perform corrosion control procedures | 100 |
| F228 Paint or stencil identifiers or instructions on equipment or weapons | 100 |
| G276 Inspect MHU-159/E missile-handling units | 100 |
| F216 Inspect equipment on receipt | 100 |
| I458 Remove or replace pylon decoder-receivers | 100 |
| F212 Evaluate damage to missile surfaces | 100 |
| I459 Remove or replace pylon relay assemblies | 100 |
| E136 Make entries on AF Forms 2432 (Key Issue Log) | 83 |
| F271 Transport pylons | 83 |
| E165 Make entries on SF 702 (Security Container Check Sheet) | 83 |
| K545 Remove or replace engine desiccant assemblies | 83 |
| F244 Perform weapons storage area security checks | 83 |
| F207 Apply fillers, paints, sealers, or adhesives | 67 |
| F208 Authenticate alarmed facility openings or closings | 67 |
| G273 Clean missile support equipment | 67 |
| F219 Inspect safety devices, such as pins, chocks, or flags | 67 |
| G281 Inspect rail sets | 67 |
| F268 Transport equipment | 67 |
| F246 Remove or replace access covers, plates, panels, or raceway covers | 67 |
| F242 Perform pretow inspections on weapon systems | 67 |
| F240 Perform post-tow inspections on weapon systems | 67 |
| F238 Perform munitions convoy duties | 50 |

TABLE A6

SUPPLY
(STG058)GROUP SIZE: 26
PERCENT OF SAMPLE: 4
PREDOMINANT PAYGRADE: E-4AVERAGE TICF: 84 MONTHS
AVERAGE TAFMS: 106 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|--|----------------------------------|
| E131 Make entries on AF Forms 2005 (Issue/Turn-in Request) | 96 |
| E172 Review AF Forms 2005 (Issue/Turn-in Request) | 88 |
| E156 Make entries on DD Forms 1574 (Serviceable Tag - Materiel) | 88 |
| E181 Review AFTO Forms 350 (Repair Item Processing Tag) | 85 |
| E129 Make entries on AF Forms 1297 (Temporary Issue Receipt) | 85 |
| E187 Review DD Forms 1577 (Unserviceable (Condemned) Tag Materiel) | 81 |
| E159 Make entries on DD Forms 1577 (Unserviceable (Condemned) Tag Materiel) | 81 |
| E136 Make entries on AF Forms 2432 (Key Issue Log) | 81 |
| E116 Coordinate bench stock or supply requirements with base supply | 77 |
| E132 Make entries on AF Forms 2413 (Supply Control Log) | 77 |
| E184 Review DD Forms 1574 (Serviceable Tag - Materiel) | 77 |
| E150 Make entries on AFTO Forms 350 (Reparable Item Processing Tag) | 77 |
| E160 Make entries on DD Forms 1577-2 (Unserviceable (Reparable) Tag Materiel) | 73 |
| E196 Update CAMS data | 73 |
| C73 Inventory equipment, tools, or supplies | 73 |
| E154 Make entries on DD Forms 1348-6 (DOD Single Line Item Requisition System Document (Manual - Long Form)) | 73 |
| E170 Research information in supply publications | 69 |
| E153 Make entries on DD Forms 1348-1 (DOD Single Line Item Release/Receipt Document) | 69 |
| E188 Review DD Forms 1577-2 (Unserviceable (Reparable) Tag Materiel) | 69 |
| E130 Make entries on AF Forms 1800 (Operator's Inspection Guide and Trouble Report (General Purpose Vehicles)) | 69 |
| F227 Pack supply turn-ins | 65 |
| E134 Make entries on AF forms 2427 (Lock and Key Control Register) | 65 |
| E171 Research information in technical publications | 62 |
| A5 Determine work priorities | 58 |

TABLE A7
SUPPORT EQUIPMENT MAINTENANCE
(STG075)

GROUP SIZE: 15
PERCENT OF SAMPLE: 2.5
PREDOMINANT PAYGRADE: E-4

AVERAGE TICF: 56 MONTHS
AVERAGE TAFMS: 60 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|---|----------------------------------|
| G273 Clean missile support equipment | 100 |
| F217 Inspect equipment or weapons for corrosion | 100 |
| F230 Perform corrosion control procedures | 93 |
| F207 Apply fillers, paints, sealers, or adhesives | 93 |
| F228 Paint or stencil identifiers or instructions on equipment or weapons | 93 |
| F216 Inspect equipment on receipt | 93 |
| F222 Open or close alarmed facilities | 93 |
| E136 Make entries on AF Forms 2432 (Key Issue Log) | 87 |
| G289 Remove or replace compressed-gas cylinders | 80 |
| G281 Inspect rail sets | 73 |
| F221 Issue equipment or tools | 73 |
| E196 Update CAMS data | 73 |
| G279 Remove or replace nonelectronic support equipment mechanical components | 73 |
| E147 Make entries on AFTO Forms 244 (Industrial/Support Equipment Record) | 67 |
| E167 Monitor status of equipment, missiles, or munitions | 67 |
| F256 Remove or replace gaskets, seals, or packing | 67 |
| G279 Inspect MSU-179/E missile test stands | 67 |
| F210 Clean electronic test equipment | 67 |
| G275 Inspect KMU-415/A guided-missile hydraulic-fluid maintenance kits | 67 |
| C73 Inventory equipment, tools, or supplies | 60 |
| G282 Leak test nitrogen-charging adapter sets | 60 |
| F235 Perform hazardous materials storage or disposal actions | 60 |
| F219 Inspect safety devices, such as pins, chocks, or flags | 53 |
| F215 Identify safety hazards | 53 |
| E150 Make entries on AFTO Forms 350 (Reparable Item Processing Tag) | 53 |
| F226 Pack or unpack test equipment | 53 |
| E131 Make entries on AF Forms 2005 (Issue/Turn-in Request) | 53 |
| G277 Inspect MHU-200/E missile-handling units | 47 |
| G278 Inspect missile fuel-defuel equipment | 47 |
| G280 Inspect MSU-202/E missile maintenance stands | 47 |

TABLE A8
ELECTRONIC EQUIPMENT MAINTENANCE
(STG085)

GROUP SIZE: 56
PERCENT OF SAMPLE: 9.5
PREDOMINANT PAYGRADE: E-5

AVERAGE TICF: 87 MONTHS
AVERAGE TAFMS: 94 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|---|----------------------------------|
| H337 Perform ESTSs operational assurance tests | 100 |
| H303 Align missile radar altimeter test assembly (MRATA) radio frequency (RF) circuits | 100 |
| F266 Repair electrical cables or connectors | 98 |
| H336 Perform ESTS confidence tests | 98 |
| H367 Perform periodic inspections on CCUs | 98 |
| H335 Perform ESTS calibration certification tests | 96 |
| H334 Perform ESTS autocalibrations (ACALs) | 96 |
| H428 Service ESTS air filters | 96 |
| F252 Remove or replace electrical cables or connectors | 96 |
| H379 Perform self-tests on MRATAs | 96 |
| H301 Align electronic system test set (ESTS) patchboard-receiver contacts | 96 |
| H325 Functionally test CCUs | 96 |
| H311 Calibrate MRATA power supplies | 96 |
| H394 Remove or replace ESTS disc drives | 96 |
| F210 Clean electronic test equipment | 95 |
| H322 Clean ESTS line-printer printheads | 95 |
| F264 Remove or replace solderless wire connections | 95 |
| H360 Perform MRATA calibration factor-loading procedures | 95 |
| H369 Perform periodic inspections on MRATAs | 93 |
| H302 Align ESTS disc-drive adjustable parameters | 93 |
| H309 Calibrate ESTS power supplies | 93 |
| H308 Calibrate cooling control units (CCUs) | 93 |
| H349 Perform fault isolations on MRATA active RF-control and monitor components | 93 |
| H341 Perform fault isolations on ESTS disc drives or controllers using diagnostic tapes | 93 |
| F226 Pack or unpack test equipment | 93 |
| H347 Perform fault isolations on interconnecting groups | 91 |
| F255 Remove or replace fuses | 91 |
| F257 Remove or replace gauges | 91 |
| H350 Perform fault isolations on MRATA coaxial switch assemblies | 91 |
| H353 Perform fault isolations on MRATA RF-generating components | 91 |

TABLE A9
MUNITIONS CONTROLLER
(STG148)

GROUP SIZE: 20
PERCENT OF SAMPLE: 3.4
PREDOMINANT PAYGRADE: E-4

AVERAGE TICF: 63 MONTHS
AVERAGE TAFMS: 70 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|--|----------------------------------|
| B50 Track equipment, weapons, or munitions movements | 100 |
| B41 Initiate maintenance work orders | 100 |
| B29 Coordinate munitions maintenance activities with other units or agencies | 100 |
| E167 Monitor status of equipment, missiles, or munitions | 95 |
| E168 Monitor status of work orders | 95 |
| B30 Coordinate munitions movements with control or emergency organizations | 95 |
| E200 Update status boards, such as items awaiting maintenance or parts | 90 |
| B35 Direct movement of equipment | 90 |
| B37 Direct weapons movements | 90 |
| E195 Secure classified items, such as tapes, mission scoring data, or computer discs | 90 |
| E196 Update CAMS data | 85 |
| B34 Direct maintenance activities | 85 |
| B28 Coordinate aircraft repair activities with other agencies, AFSSs, or units | 80 |
| A5 Determine work priorities | 80 |
| E119 Coordinate weapons or aircraft status changes with appropriate agencies | 75 |
| E165 Make entries on SF 702 (Security Container Check Sheet) | 75 |
| E129 Make entries on AF Forms 1297 (Temporary Issue Receipt) | 70 |
| E136 Make entries on AF Forms 2432 (Key Issue Log) | 65 |
| E125 Maintain classified document files | 65 |
| E164 Make entries on SF 701 (Activity Security Checklist) | 65 |
| E166 Monitor personnel availability status | 60 |
| B25 Assign maintenance tasks to personnel | 55 |
| E198 Update configuration status and accounting systems | 50 |
| A15 Plan maintenance activities | 45 |
| E183 Review core automated maintenance system (CAMS) products | 45 |
| A23 Schedule equipment utilizations | 45 |
| B38 Implement emergency war order (EWO) plans | 45 |
| E194 Review SF 702 (Security Container Check Sheet) | 45 |
| E189 Review generation maintenance plan checklists | 45 |

TABLE A10
MISSILE ANALYST
(STG073)

GROUP SIZE: 17
PERCENT OF SAMPLE: 3
PREDOMINANT PAYGRADE: E-4

AVERAGE TICF: 80 MONTHS
AVERAGE TAFMS: 86 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING</u> |
|--|---|
| E122 Initiate or make entries on AFTO Forms 95 (Significant Historical Data) | 94 |
| B26 Compile data for reports or staff studies | 94 |
| E167 Monitor status of equipment, missiles, or munitions | 94 |
| C53 Analyze maintenance trends | 88 |
| E124 Initiate retest OK (RTOK) reports | 82 |
| E198 Update configuration status and accounting systems | 76 |
| E196 Update CAMS data | 65 |
| E120 Edit reports or correspondence | 59 |
| E168 Monitor status of work orders | 59 |
| E183 Review core automated maintenance system (CAMS) products | 53 |
| B33 Direct analysis functions | 53 |
| A5 Determine work priorities | 53 |
| B50 Track equipment, weapons, or munitions movements | 47 |
| C56 Conduct self-inspection programs | 47 |
| A9 Develop work methods or procedures | 41 |
| E127 Maintain publication or TO libraries | 41 |
| E119 Coordinate weapons or aircraft status changes with appropriate agencies | 35 |
| E204 Write messages or correspondences | 35 |
| A21 Review unit disaster plans | 29 |
| E203 Write inspection or maintenance reports | 29 |

TABLE A11

MISSILE MAINTENANCE MANAGEMENT CLUSTER
(STG039)

GROUP SIZE: 81
PERCENT OF SAMPLE: 14
PREDOMINANT PAYGRADE: E-7

AVERAGE TICF: 168 MONTHS
AVERAGE TAFMS: 205 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|--|----------------------------------|
| A5 Determine work priorities | 88 |
| B42 Interpret directives, policies, or procedures for subordinates | 81 |
| A4 Determine requirements for equipment, personnel, space, or supplies | 81 |
| B31 Counsel personnel on personal or military-related matters | 81 |
| C55 Conduct performance feedback worksheet (PFW) sessions | 77 |
| E204 Write messages or correspondences | 74 |
| B27 Conduct briefings or meetings | 74 |
| E167 Monitor status of equipment, missiles, or munitions | 74 |
| A9 Develop work methods or procedures | 73 |
| B26 Compile data for reports or staff studies | 72 |
| C67 Evaluate subordinates for compliance with performance standards | 72 |
| C80 Write EPRs | 72 |
| C81 Write recommendations for awards or decorations | 72 |
| A24 Schedule leaves or passes | 72 |
| A11 Establish performance standards for subordinates | 69 |
| C56 Conduct self-inspection programs | 69 |
| A10 Establish organizational policies, operating instructions (OIs), or standing operating procedures (SOPs) | 67 |
| C78 Review inspection reports | 67 |
| A16 Plan meetings or briefings | 67 |
| B52 Write recommendations for changes in procedures | 65 |
| A15 Plan maintenance activities | 62 |
| B29 Coordinate munitions maintenance activities with other units or agencies | 62 |
| B32 Direct administrative functions | 62 |
| A6 Develop job descriptions | 60 |
| A19 Plan work assignments | 59 |
| C70 Evaluate work schedules | 59 |
| B34 Direct maintenance activities | 59 |
| A1 Assign personnel to duty positions | 59 |
| B25 Assign maintenance tasks to personnel | 57 |
| E168 Monitor status of work orders | 57 |

TABLE A12

SHIFT SUPERVISOR
(STG071)

GROUP SIZE: 12
 PERCENT OF SAMPLE: 2
 PREDOMINANT PAYGRADE: E-6

AVERAGE TICE: 124 MONTHS
 AVERAGE TAFMS: 171 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|---|----------------------------------|
| B25 Assign maintenance tasks to personnel | 100 |
| C80 Write EPRs | 100 |
| E150 Make entries on AFTO Forms 350 (Reparable Item Processing Tag) | 100 |
| B31 Counsel personnel on personal or military-related matters | 92 |
| C55 Conduct performance feedback worksheet (PFW) sessions | 92 |
| A5 Determine work priorities | 83 |
| B45 Supervise Air Launched Missile Systems Specialists (AFSC 46650) | 83 |
| E167 Monitor status of equipment, missiles, or munitions | 83 |
| E183 Review core automated maintenance system (CAMS) products | 83 |
| E131 Make entries on AF Forms 2005 (Issue/Turn in Request) | 83 |
| E168 Monitor status of work orders | 75 |
| B41 Initiate maintenance work orders | 75 |
| E166 Monitor personnel availability status | 75 |
| A11 Establish performance standards for subordinates | 75 |
| E156 Make entries on DD Forms 1574 (Serviceable Tag - Materiel) | 75 |
| E160 Make entries on DD Forms 1577-2 (Unserviceable (Reparable) Tag Materiel) | 75 |
| E181 Review AFTO Forms 350 (Repair Item Processing Tag) | 75 |
| E196 Update CAMS data | 67 |
| B46 Supervise Air Launched Missile Systems Technicians (AFSC 46670) | 67 |
| C67 Evaluate subordinates for compliance with performance standards | 67 |
| B42 Interpret directives, policies, or procedures for subordinates | 67 |
| A19 Plan work assignments | 58 |
| F217 Inspect equipment or weapons for corrosion | 58 |
| E200 Update status boards, such as items awaiting maintenance or parts | 58 |
| A24 Schedule leaves or passes | 58 |
| B27 Conduct briefings or meetings | 58 |
| E172 Review AF Forms 2005 (Issue/Turn-in Request) | 58 |
| F232 Perform escort duties | 58 |

TABLE A13
MAINTENANCE SUPERINTENDENT
(STG082)

GROUP SIZE: 46
PERCENT OF SAMPLE: 8
PREDOMINANT PAYGRADE: E-7

AVERAGE TICF: 164 MONTHS
AVERAGE TAFMS: 202 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|---|----------------------------------|
| B31 Counsel personnel on personal or military-related matters | 100 |
| A5 Determine work priorities | 98 |
| A4 Determine requirements for equipment, personnel, space, or supplies | 98 |
| B42 Interpret directives, policies, or procedures for subordinates | 93 |
| C80 Write EPRs | 93 |
| C81 Write recommendations for awards or decorations | 93 |
| C55 Conduct performance feedback worksheet (PFW) sessions | 93 |
| A24 Schedule leaves or passes | 93 |
| A9 Develop work methods or procedures | 93 |
| C56 Conduct self-inspection programs | 91 |
| E167 Monitor status of equipment, missiles, or munitions | 89 |
| C67 Evaluate subordinates for compliance with performance standards | 87 |
| A11 Establish performance standards for subordinates | 87 |
| A1 Assign personnel to duty positions | 87 |
| E204 Write messages or correspondences | 85 |
| C70 Evaluate work schedules | 83 |
| B26 Compile data for reports or staff studies | 83 |
| C78 Review inspection reports | 80 |
| B34 Direct maintenance activities | 80 |
| A19 Plan work assignments | 78 |
| A15 Plan maintenance activities | 78 |
| A6 Develop job descriptions | 78 |
| B32 Direct administrative functions | 76 |
| E168 Monitor status of work orders | 76 |
| B29 Coordinate munitions maintenance activities with other units or agencies | 76 |
| E166 Monitor personnel availability status | 74 |
| A16 Plan meetings or briefings | 74 |
| A10 Establish organizational policies, operating instructions (OIs), or standing operating procedures | 74 |
| E123 Initiate personnel action requests, such as skill upgrade actions or duty title changes | 74 |

TABLE A14

SENIOR MANAGER
(STG083)

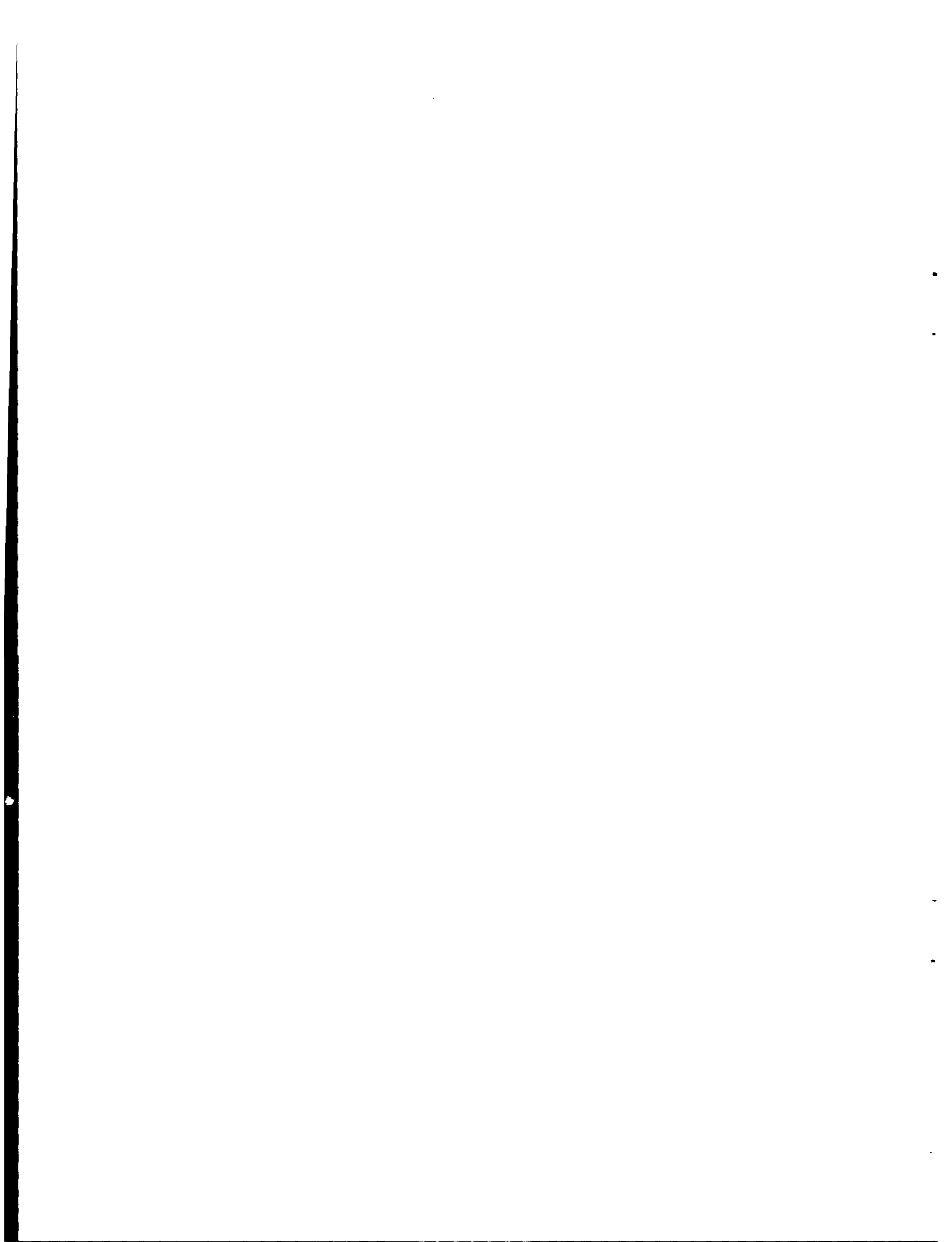
GROUP SIZE: 18
 PERCENT OF SAMPLE: 3
 PREDOMINANT PAYGRADE: E-8

AVERAGE TICF: 201 MONTHS
 AVERAGE TAFMS: 232 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

| TASKS | PERCENT MEMBERS PERFORMING |
|---|----------------------------------|
| B26 Compile data for reports or staff studies | 100 |
| A13 Establish publication or technical order (TO) requirements | 100 |
| B27 Conduct briefings or meetings | 94 |
| C69 Evaluate technical data | 89 |
| E204 Write messages or correspondences | 89 |
| C60 Evaluate equipment modification data | 89 |
| A16 Plan meetings or briefings | 89 |
| B52 Write recommendations for changes in procedures | 89 |
| A10 Establish organizational policies, operating instructions (OIs), or standing operating procedures (SOPs) | 83 |
| C57 Evaluate contractor services or products | 78 |
| C59 Evaluate equipment development data | 78 |
| E120 Edit reports or correspondence | 78 |
| E206 Write staff studies or surveys | 78 |
| A4 Determine requirements for equipment, personnel, space, or supplies | 78 |
| E171 Research information in technical publications | 72 |
| A9 Develop work methods or procedures | 72 |
| E179 Review AFTO Forms 27 (Technical Order System, Publication Change Request) | 67 |
| E177 Review AFTO Forms 22 (Technical Order System Publication Improvement Report and Reply) | 67 |
| A5 Determine work priorities | 67 |
| C78 Review inspection reports | 67 |
| C53 Analyze maintenance trends | 67 |
| E117 Coordinate contractor modifications for weapons systems with appropriate agencies | 61 |
| B51 Write recommendations for changes in equipment | 61 |
| C62 Evaluate inspection procedures | 61 |
| A20 Review equipment or personnel utilization policy changes | 61 |
| B42 Interpret directives, policies, or procedures for subordinates | 61 |
| B33 Direct analysis functions | 61 |
| A3 Determine budget or financial requirements | 61 |
| C68 Evaluate suggestions | 56 |

APPENDIX B
UNSUPPORTED AFSC 466X0 STS ELEMENTS



APPENDIX B

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | |
|---|------------|----------------------------|------------|------------|-----------|-----------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | TSK DIF |
| 6a. DETERMINE WHICH PERSONNEL NEED TRAINING | | | | | | | |
| D114 Select individuals for specialized training | .29 | * | 0 | 0 | 3 | 17 | 4.76 |
| 8d. USE THE COMBAT AMMUNITION SYSTEM, BASE LEVEL (CAS-B) | | | | | | | |
| E182 Review base-level combat ammunition system (CAS-B) products | .12 | * | 0 | 0 | 0 | 3 | 4.91 |
| E197 Update CAS-B data | .67 | 2 | 0 | 1 | 2 | 2 | 4.87 |
| 9b. INITIATE ACCIDENT/INCIDENT/DEFICIENCY REPORTS | | | | | | | |
| E205 Write special reports, such as bent spear, broken arrow, or dull sword reports | .82 | 2 | 1 | 2 | 11 | 16 | 5.56 |
| 9e(6). AFTO FORM 95, SIGNIFICANT HISTORICAL DATA | | | | | | | |
| E122 Initiate or make entries on AFTO Forms (Significant Historical Data) | 1.45 | 2 | 1 | 4 | 11 | 16 | 3.90 |

* No ATI value calculated

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | | TSK DIF |
|---|------------|----------------------------|------------|------------|-----------|-----------|------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | | |
| 9e(8). AFTO FORM 108, TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT CERTIFICATION TAG | | | | | | | | |
| E128 Maintain TMDE processing records | .84 | 2 | 1 | 1 | 5 | 7 | 4.70 | |
| E144 Make entries on AFTO Forms 108 (TMDE certification) | .80 | 2 | 0 | 1 | 11 | 16 | 3.44 | |
| E201 Validate TMDE equipment processing records | .57 | 2 | 0 | 1 | 4 | 5 | 4.21 | |
| 10b(3). RETEST OK (RTOK) REPORTING AND TRACKING | | | | | | | | |
| E124 Initiate retest OK (RTOK) reports | 1.27 | 2 | 1 | 2 | 14 | 13 | 4.60 | |
| 14c(4). IMPACT FUZE | | | | | | | | |
| K554 Remove or replace impact fuzes | 2.02 | 7 | 16 | 15 | 14 | 6 | 4.48 | |
| 14c(5). ELECTRICAL RESISTANCE TEMPERATURE TRANSMITTER | | | | | | | | |
| K542 Remove or replace electrical resistance temperature transmitter (ERTT) temperature probes | 2.78 | 7 | 14 | 17 | 16 | 10 | 5.43 | |
| 14c(6). PITOT-STATIC TUBE | | | | | | | | |
| K558 Remove or replace pitot-static tubes | 2.80 | 7 | 15 | 19 | 18 | 7 | 4.97 | |

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | | <u>PERCENT MEMBERS PERFORMING</u> | | | | | | |
|---|----------------|-----------------------------------|----------------|----------------|---------------|---------------|----------------|--|
| | | <u>ATI</u> | <u>1ST JOB</u> | <u>1ST ENL</u> | <u>5- LVL</u> | <u>7- LVL</u> | <u>TSK DIF</u> | |
| | <u>TNG EMP</u> | | | | | | | |
| 14c(11). AIR CYCLE MACHINE | | | | | | | | |
| K537 Remove or replace air-cycle machines | 2.22 | 7 | 6 | 8 | 13 | 8 | 5.10 | |
| 14c(14). HEAT EXCHANGER | | | | | | | | |
| K556 Remove or replace missile heat exchangers | 2.00 | 7 | 10 | 15 | 19 | 8 | 5.19 | |
| 14c(15). DEPLOYMENT ACTUATOR CARTRIDGES | | | | | | | | |
| K539 Remove or replace deployment actuator cartridges | 2.76 | 7 | 15 | 16 | 19 | 9 | 5.15 | |
| 14c(17). CONTROL SURFACES | | | | | | | | |
| K532 Remove or replace AGM-86B fins | 2.59 | 7 | 7 | 11 | 13 | 8 | 6.11 | |
| K536 Remove or replace AGM-86B wings | 2.12 | 7 | 1 | 3 | 5 | 3 | 6.66 | |
| K544 Remove or replace elevons | 2.82 | 7 | 0 | 5 | 11 | 5 | 5.89 | |
| 14c(18). THERMAL BATTERY | | | | | | | | |
| K535 Remove or replace AGM-86B thermal batteries | 2.20 | 7 | 1 | 8 | 9 | 3 | 5.19 | |

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | TSK DIF |
|--|------------|----------------------------|------------|------------|-----------|-----------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | |
| 14c(19). ENGINE AIR INLET | | | | | | | |
| K546 Remove or replace engine inlet flexible ducts | 2.10 | 7 | 6 | 7 | 9 | 6 | 4.79 |
| 14c(20). FUEL PUMP ELECTRONIC UNITS | | | | | | | |
| K552 Remove or replace fuel-pump electronic units | 2.67 | 7 | 9 | 14 | 18 | 9 | 5.11 |
| 14c(21). ELECTRICAL J-BOX | | | | | | | |
| K541 Remove or replace electrical J-boxes | 2.37 | 7 | 10 | 17 | 19 | 7 | 4.95 |
| 14d(6). MISSILE FUEL/DEFUEL | | | | | | | |
| K517 Fuel or defuel AGM-86B missiles | 3.12 | 7 | 6 | 11 | 11 | 5 | 6.79 |
| 15c(1). CONTROL SURFACES | | | | | | | |
| L587 Remove or replace AGM-129A fins | 2.02 | 7 | 5 | 5 | 4 | 4 | 6.17 |
| L594 Remove or replace AGM-129A wings | 1.16 | * | 0 | 0 | 1 | 2 | 7.48 |

* No ATI value calculated

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | | TSK DIF |
|--|------------|----------------------------|------------|------------|-----------|-----------|------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | | |
| 15c(2). ENGINE | | | | | | | | |
| L585 Remove or replace AGM-129A engines | 2.18 | * | 0 | 0 | 2 | 3 | 6.57 | |
| 15c(3). ELECTRICAL EQUIPMENT COOLING UNIT | | | | | | | | |
| L600 Remove or replace electrical-equipment cooling equipment | 1.80 | * | 0 | 0 | 2 | 3 | 5.38 | |
| 15c(4). THERMAL BATTERIES | | | | | | | | |
| L593 Remove or replace AGM-129A thermal batteries | 1.45 | * | 0 | 0 | 1 | 2 | 5.83 | |
| 15c(5). FORWARD AVIONICS UNIT | | | | | | | | |
| L588 Remove or replace AGM-129A forward avionics units | 2.29 | 7 | 2 | 3 | 3 | 4 | 6.23 | |
| 15c(6). SEPARATION SWITCH | | | | | | | | |
| L592 Remove or replace AGM-129A separation switches | 1.57 | 2 | 1 | 1 | 1 | 3 | 5.75 | |

* No ATI value calculated

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | |
|--|------------|----------------------------|------------|------------|-----------|-----------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | TSK DIF |
| 15c(7). CABLE ASSEMBLIES | | | | | | | |
| L584 Remove or replace AGM-129A cable assemblies | 1.45 | 2 | 0 | 1 | 1 | 3 | 6.73 |
| 15c(8). ELECTRICAL/PNEUMATIC DISTRIBUTION | | | | | | | |
| L601 Remove or replace electrical-pneumatic distribution boxes | 1.73 | * | 0 | 0 | 2 | 3 | 5.93 |
| 15c(9). ARM/DISARM DEVICE | | | | | | | |
| L598 Remove or replace arm-disarm devices | 1.90 | 7 | 0 | 1 | 2 | 3 | 5.62 |
| 15c(10). IMPACT SENSOR ASSEMBLY | | | | | | | |
| L589 Remove or replace AGM-129A impact sensor assembly | 1.08 | 2 | 0 | 1 | 1 | 3 | 5.78 |
| 15c(11). AFT AVIONICS UNIT | | | | | | | |
| L583 Remove or replace AGM-129A aft avionics unit | 2.18 | 7 | 2 | 2 | 4 | 4 | 6.53 |

* No ATI value calculated

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | |
|--|------------|----------------------------|------------|------------|-----------|-----------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | TSK DIF |
| 15c(12). NAVIGATION CONTROL SET | | | | | | | |
| L603 Remove or replace navigation control sets | 2.45 | 7 | 2 | 3 | 3 | 4 | 5.97 |
| 15c(13). SENSOR SET | | | | | | | |
| L605 Remove or replace sensor sets | 2.04 | 7 | 2 | 2 | 3 | 4 | 5.61 |
| 15c(14). RADAR ALTIMETER | | | | | | | |
| L591 Remove or replace AGM-129A MRAs | 1.96 | 7 | 2 | 3 | 3 | 3 | 5.97 |
| 15c(15). PRESSURE TRANSMITTER | | | | | | | |
| L604 Remove or replace pressure transmitters | 1.75 | * | 0 | 0 | 1 | 3 | 5.87 |
| 15c(16). AIR DATA PIOT ASSEMBLY | | | | | | | |
| L596 Remove or replace air-data pitot assemblies | 1.43 | * | 0 | 0 | 1 | 3 | 6.30 |

* No ATI value calculated

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | TSK DIF |
|---|------------|----------------------------|------------|------------|-----------|-----------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | |
| 15c(17). ALTIMETER ANTENNAS | | | | | | | |
| L597 Remove or replace altimeter antennae | 1.61 | 2 | 0 | 1 | 2 | 3 | 5.99 |
| 15c(18). GAS PRESSURE GENERATOR | | | | | | | |
| L602 Remove or replace gas pressure generators | 1.12 | * | 0 | 0 | 2 | 3 | 5.66 |
| 15c(19). DESICCANT ASSEMBLIES | | | | | | | |
| L599 Remove or replace desiccant assemblies | 2.39 | 7 | 2 | 3 | 4 | 3 | 5.01 |
| 15c(20). EXPLOSIVE ACTUATORS | | | | | | | |
| L586 Remove or replace AGM-129A explosive actuators | 1.57 | * | 0 | 0 | 1 | 3 | 5.94 |
| 15c(21). AIR SHUTOFF VALVE | | | | | | | |
| L595 Remove or replace air shutoff valves | 1.39 | * | 0 | 0 | 2 | 3 | 5.75 |

* No ATI value calculated

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | |
|---|------------|----------------------------|------------|------------|-----------|-----------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | TSK DIF |
| 15c(22). LINEAR ELECTROMECHANICAL ACTUATOR | | | | | | | |
| L590 Remove or replace AGM-129A linear electro-mechanical actuators | 1.45 | * | 0 | 0 | 1 | 3 | 6.19 |
| 15d(1). FUEL/DEFUEL | | | | | | | |
| K570 Fuel or defuel AGM-129A missiles | 2.22 | 7 | 1 | 2 | 1 | 3 | 5.93 |
| 15d(2). EMERGENCY DEFUEL | | | | | | | |
| L574 Perform AGM-129A emergency defuels | 2.55 | 7 | 0 | 1 | 1 | 1 | 5.74 |
| 15d(3). TRANSFER | | | | | | | |
| L580 Perform AGM-129A missile hoist transfer procedures | 2.27 | 7 | 16 | 12 | 7 | 4 | 4.71 |
| 15d(4). MISSILE LEAK CHECK | | | | | | | |
| L581 Perform AGM-129A missile leak tests | 2.71 | 7 | 14 | 10 | 6 | 4 | 5.53 |

* No ATI value calculated

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | |
|---|------------|----------------------------|------------|------------|-----------|-----------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | TSK DIF |
| 15e(2). ISOLATE MISSILE MALFUNCTIONS | | | | | | | |
| L579 Perform AGM-129A missile fault isolations | 2.45 | 7 | 9 | 6 | 4 | 5 | 5.96 |
| 15f. PERFORM GUIDANCE SET AUTOCALIBRATION | | | | | | | |
| L576 Perform AGM-129A guidance set autocalibration | 1.82 | * | 0 | 0 | 0 | 2 | 5.43 |
| 17b(4). FUEL/DEFUEL EQUIPMENT | | | | | | | |
| G278 Inspect missile fuel-defuel equipment | 3.14 | 7 | 15 | 16 | 15 | 17 | 5.38 |
| G293 Remove or replace missile fuel-defuel equipment components | 1.88 | 7 | 4 | 7 | 9 | 8 | 5.42 |
| 17b(8). GUIDED MISSILE HANDLING UNIT (MHU-200/E) | | | | | | | |
| G277 Inspect MHU-200/E missile-handling units | 2.33 | 7 | 11 | 12 | 8 | 7 | 3.87 |
| 17b(9). MISSILE NITROGEN CHARGING ADAPTER SET | | | | | | | |
| G294 Remove or replace missile nitrogen charging adapter set components | 1.63 | 2 | 14 | 13 | 12 | 11 | 4.31 |

* No ATI value calculated

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | | TSK DIF |
|--|------------|----------------------------|------------|------------|-----------|-----------|------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | | |
| 17b(10). GENIE MIX-N-MATCH PORTABLE LIFT | | | | | | | | |
| G286 Perform periodic inspections on Genie portable lifts | 1.37 | 2 | 4 | 5 | 13 | 15 | 4.10 | |
| G291 Remove or replace Genie portable lift components | 1.14 | 2 | 0 | 3 | 10 | 11 | 4.11 | |
| 17b(11). LAUNCHER ROTATION TOOL | | | | | | | | |
| H324 Electrically check launcher rotation tools | 1.18 | 2 | 0 | 1 | 3 | 7 | 5.51 | |
| H330 Operationally check launcher rotation tools | 1.45 | 2 | 0 | 1 | 3 | 8 | 4.99 | |
| H348 Perform fault isolations on launcher rotation tools | 1.53 | 2 | 0 | 1 | 2 | 6 | 5.76 | |
| H362 Perform periodic inspections on AGM-69A launcher rotation tools | 1.49 | 2 | 1 | 1 | 2 | 8 | 5.00 | |
| H412 Remove or replace launcher rotation tool components | 1.33 | 2 | 0 | 1 | 1 | 7 | 5.46 | |
| 17b(12). MODIFIED NITROGEN CHARGING ADAPTER SET | | | | | | | | |
| G288 Remove or replace B-52 nitrogen charging adapter set components | 1.24 | 2 | 0 | 1 | 3 | 5 | 4.17 | |
| 17b(14). GUIDED MISSILE MAINTENANCE STAND, MSU-202/E | | | | | | | | |
| G280 Inspect MSU-202/E missile maintenance stands | 2.49 | 7 | 11 | 13 | 8 | 6 | 3.79 | |
| G295 Remove or replace nonelectronic support equipment mechanical components | 1.14 | 2 | 12 | 13 | 14 | 10 | 4.19 | |

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | | TSK DIF |
|---|------------|----------------------------|------------|------------|-----------|-----------|------|------------|
| | | ATI | 1ST JOB | 1ST LNL | 5- LVL | 7- LVL | | |
| 17d(1). AGM-69A MISSILE TEST STAND, A/F32AT-1A | | | | | | | | |
| H299 Adjust AGM-69A missile test stand potentiometers | 1.59 | 2 | 0 | 1 | 8 | 12 | 5.48 | |
| H300 Adjust AGM-69A missile test stand snubbers | 1.82 | 2 | 6 | 4 | 9 | 13 | 4.96 | |
| H317 Change oil in AGM-69A missile test stands | 1.06 | 2 | 0 | 1 | 8 | 12 | 4.42 | |
| H328 Operationally check AGM-69A missile test stands | 2.14 | 7 | 7 | 6 | 10 | 14 | 5.65 | |
| 17d(2). ELECTRONIC SYSTEM TEST SET (ESTS) AN/GSM-263, AN/GSM-263A, and AN/GSM-263C | | | | | | | | |
| H301 Align electronic system test set (ESTS) patch-board- receiver contacts | 1.80 | 2 | 6 | 8 | 16 | 16 | 5.17 | |
| 17d(3). AIR DATA TEST SET, AN/GSM-291 | | | | | | | | |
| H304 Calibrate air data test systems (ADTs) | 1.57 | 2 | 1 | 3 | 7 | 9 | 6.90 | |
| 17d(5). SIGNAL DATA CONVERTER CV-364/GSM-263 | | | | | | | | |
| H315 Calibrate signal data converters | 1.12 | 2 | 1 | 2 | 6 | 7 | 5.80 | |
| 17d(7). ELECTRONIC COMPONENTS COOLING EQUIPMENT (MXU-690/E) (MXU-690/F) | | | | | | | | |
| H308 Calibrate cooling control units (CCUs) | 1.57 | 2 | 1 | 2 | 11 | 14 | 5.80 | |

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | | TSK DIF |
|--|------------|----------------------------|------------|------------|-----------|-----------|------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | | |
| 17d(8). AIRFLOW COOLING MONITOR | | | | | | | | |
| H305 Calibrate airflow cooling monitors | .90 | * | 0 | 0 | 7 | 9 | 5.94 | |
| 17d(9). ELECTRICAL CIRCUITS TEST SET, AN/AWM-41A | | | | | | | | |
| H306 Calibrate AN/AWM-41A electrical circuit test sets | 1.25 | 2 | 1 | 2 | 5 | 10 | 6.06 | |
| 17d(10). PYLON AND LAUNCHER/MISSILE SIMULATOR | | | | | | | | |
| H371 Perform periodic inspections on PLMSs | 1.16 | * | 0 | 0 | 5 | 3 | 4.81 | |
| 17d(11). REMOTE SWITCHING CONTROL ASSEMBLY | | | | | | | | |
| H313 Calibrate remote-switching control assemblies | .86 | * | 0 | 0 | 3 | 3 | 6.50 | |
| 17d(12). SENSOR TEST SET | | | | | | | | |
| H314 Calibrate sensor test sets | .86 | * | 0 | 0 | 2 | 3 | 6.40 | |

* No ATI value calculated

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | | TSK DIF |
|--|------------|----------------------------|------------|------------|-----------|-----------|------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | | |
| 17d(13). PROXIMITY SENSOR INSTALLATION/RIGGING AND MONITOR/ISOLATION TEST SET, OSE 10A59 | | | | | | | | |
| H312 Calibrate OSE-10A59 proximity sensor installation/ rigging and monitor/isolation test sets | .63 | * | 0 | 0 | 1 | 1 | 6.51 | |
| 17d(14). EXCM DIODE MATRIX TEST SET | | | | | | | | |
| H329 Operationally check EXCM diode-matrix test sets | .84 | * | 0 | 0 | 5 | 3 | 5.45 | |
| 17e(2). OPERATIONAL ASSURANCE TEST | | | | | | | | |
| H337 Perform ESTs operational assurance tests | 2.43 | 7 | 5 | 5 | 16 | 16 | 5.28 | |
| 19c(2). NUCLEAR STATION LOGIC UNIT | | | | | | | | |
| I453 Remove or replace CSRL nuclear-station logic units | 1.96 | 7 | 11 | 13 | 12 | 6 | 5.11 | |
| 19c(3). RELAY ASSEMBLIES | | | | | | | | |
| I454 Remove or replace CSRL relay assemblies | 2.06 | 7 | 9 | 11 | 12 | 5 | 5.22 | |

* No ATI value calculated

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | TSK DIF |
|--|------------|----------------------------|------------|------------|-----------|-----------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | |
| 19c(4). POWER CONTROL ASSEMBLY | | | | | | | |
| I464 Remove or replace 180-inch multipurpose-launcher power-control assemblies | 1.80 | 2 | 7 | 8 | 8 | 5 | 4.98 |
| 19c(5). TRANSFORMER RECTIFIER | | | | | | | |
| I465 Remove or replace 180-inch multipurpose-launcher transformer rectifiers | 1.47 | 2 | 6 | 7 | 6 | 5 | 4.95 |
| 19c(6). POWER SUPPLY | | | | | | | |
| I463 Remove or replace 180-inch multipurpose-launcher power supplies | 1.71 | 2 | 9 | 11 | 8 | 5 | 4.93 |
| 20d(2). RELAY ASSEMBLY | | | | | | | |
| I459 Remove or replace pylon relay assemblies | 2.98 | 7 | 4 | 10 | 18 | 9 | 5.03 |
| 21a(1). STORES MANAGEMENT PANEL | | | | | | | |
| F223 Operationally check B-1B control and display panels | 1.90 | 7 | 17 | 17 | 12 | 8 | 5.24 |

APPENDIX B (CONTINUED)

UNSUPPORTED AFSC 466X0 STS ELEMENTS

| | TNG EMP | PERCENT MEMBERS PERFORMING | | | | | TSK DIF |
|--|------------|----------------------------|------------|------------|-----------|-----------|------------|
| | | ATI | 1ST JOB | 1ST ENL | 5- LVL | 7- LVL | |
| 21a(2). STORES JETTISON PANEL | | | | | | | |
| F233 Perform fault isolations on B-1B control and display panels | 1.80 | 2 | 16 | 16 | 11 | 7 | 5.44 |
| 21a(3). PILOT STORES PANEL | | | | | | | |
| F223 Operationally check B-1B control and display panels | 1.90 | 7 | 17 | 17 | 12 | 8 | 5.24 |
| 21c. PERFORM B-52G/H MISSILE CONSENT PANEL CHECKOUT | | | | | | | |
| F224 Operationally check B-52 control and display panels, such as missile consent panels | 1.65 | 2 | 4 | 3 | 3 | 3 | 4.99 |

APPENDIX C
SUMMARY OF STS 466X0 ELECTRONIC PRINCIPLES
USED ON THE JOB

ELECTRONIC PRINCIPLES RESPONSES FOR TAFMS GROUPS
AND ELECTRONIC EQUIPMENT MAINTENANCE JOB PERSONNEL

| STS PARAGRAPH | PERCENT MEMBERS RESPONDING | | | |
|--|----------------------------|-----------------------|---------------------|------------------------|
| | 1-48 MOS TAFMS | 48-96 MOS TAFMS | 97+ MOS TAFMS | ELEC EQUIP MAINT |
| 4b. Isolate faulty resistors | 12 | 26 | 19 | 88 |
| 5b. Isolate faulty relays | 22 | 30 | 20 | 82 |
| 5d. Isolate faulty solenoids | 8 | 15 | 13 | 61 |
| 6b. Isolate faulty inductors | 7 | 10 | 6 | 30 |
| 7b. Isolate faulty capacitors | 9 | 19 | 14 | 70 |
| 8b. Isolate faulty transformers | 8 | 15 | 13 | 63 |
| 19b. Isolate faulty solid state diodes | 11 | 21 | 14 | 75 |
| 20b. Isolate faulty transistors | 9 | 16 | 9 | 59 |
| 22b. Isolate faulty special purpose devices | 7 | 16 | 10 | 52 |
| 26a. Assemble crimp connectors | 48 | 55 | 38 | 98 |

ELECTRONIC PRINCIPLES RESPONSES FOR TAFMS GROUPS
AND ELECTRONIC EQUIPMENT MAINTENANCE JOB PERSONNEL
(CONTINUED)

| <u>STS PARAGRAPH</u> | <u>PERCENT MEMBERS RESPONDING</u> | | | |
|---|-----------------------------------|--------------------------------|------------------------------|---------------------------------|
| | <u>1-48 MOS TAFMS</u> | <u>48-96 MOS TAFMS</u> | <u>97+ MOS TAFMS</u> | <u>ELEC EQUIP MAINT</u> |
| 26b. Assemble coaxial connectors | 17 | 24 | 21 | 93 |
| 26c. Assemble multipin connectors | 16 | 27 | 21 | 84 |
| 27a. Use multimeter, analog | 58 | 61 | 39 | 95 |
| 27b. Use oscilloscope | 48 | 49 | 32 | 98 |
| 27c. Use signal generator | 6 | 16 | 11 | 79 |
| 27g. Use multimeter, digital | 66 | 65 | 42 | 96 |
| 33b. Isolate faulty power supplies | 23 | 30 | 22 | 89 |
| 33c. Troubleshoot power supply circuits | 10 | 15 | 12 | 55 |